GRAND ARCADE, CAMBRIDGE BUILDING SURVEY 2004-2006

Volume I: Text



A. Dickens MIFA and A. Baggs FSA



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Summary

As part of the archaeological programme ahead of development of the Grand Arcade in Cambridge a detailed record of the standing buildings on the site was made between November 2004 and April 2006. Over 100 roofed structural entities were identified, although not all of these can be considered buildings in their own right. In addition to the St. Andrew's Street frontage, nine further significant structures were been identified, some of these being survivals of Robert Sayle development and expansion, others older or on non-Sayle plots.

The oldest surviving fabric belonged to the early 18th century, one-third of the structures were 19th century in date and just less than two-thirds were 20th century. The Robert Sayle main store, occupying a significant proportion of the site, was found to have been built using the then most modern of construction techniques.

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Introduction

Detailed survey was carried out on Nos. 12 to 25 St. Andrew's Street, Cambridge, and the properties to the rear of them, between November 2004 and April 2006. This was as part of the work required as a condition of Listed Building Consent and Conservation Area Consent for the new Grand Arcade development, which required:

· Listed Building Consent:

"desk top study of the above ground history and archaeology of the entire site and a full photographic survey and evaluation of all pre-1939 buildings".

Conservation Area Consent:

"desk top study of the above ground history and archaeology of the entire site and a full photographic survey and elevation of all post-1939 buildings".

A report on recording work in the four Grade II listed buildings, Nos. 22-25 St. Andrew's Street has already been issued (Baggs and Dickens 2005). The current report concerns the remainder of the frontage (Nos. 12-21 St. Andrew's Street) and the many properties and structures between that frontage and St. Tibb's Row. Some internal details of the listed buildings were not accessible for recording until after production of the first report so the text of that is repeated here together with the previously omitted material. A detailed photographic record has also been made of the 1970s structures on the site – the Norwich Union complex and the shops at 26-30 St Andrew's Street and the multi-storey car park between Corn Exchange Street and St. Tibb's Row. This record and the available plans are preserved as part of the project archive.

The recording method consisted of three principal components: firstly the exterior of all the structures (excluding the 1970s buildings) were recorded in a 3D OS orientated survey using a Leica TPS reflectorless system. From this a detailed 3D model of the entire site has been created, selected images from which are reproduced in the report. This also allowed accurate elevations and cross-sections to be created where these did not previously exist or where traditional methods proved too difficult to carry out. Secondly the interior, and some of the exterior, architectural features were recorded using more traditional methods of measured drawings and annotated sketches accompanied by notes. Thirdly a detailed photographic record was made of the buildings at the various stages of clearance, stripping and demolition. This record amounts to just under 3000 images. Some are reproduced in this report; the remainder are held within the project archive.

The principal recorder and interpreter of much of what follows was the late Tony Baggs. At the time of his unexpected death in May 2006 parts of the text existed in draft, but most was still in note form on proformas and in Tony's field notebook. Draft figures had been completed for some areas, but not all. The core of the report that follows is based on Tony's draft text and notes supplemented by field observations made by Alison Dickens, David Webb,

Richard Newman and Nigel Randall. The figures combine data from the external TPS survey of November 2004, existing plans and Tony's measured sketches of internal details. This final version of the report has been written by Alison Dickens at whose door any errors should be placed. The volume is dedicated to Tony's memory.

Report Layout

The report is organised along principal property divisions, *i.e.* No. 12 and the structures to the rear of it, No. 13-15 and the properties to the rear and so on. The investigation identified more than 100 roofed structural entities; however, not all of these can be considered buildings in their own right. In addition to the St. Andrew's Street frontage, nine further significant structures have been identified, some of these being survivals of Robert Sayle development and expansion, others older or on non-Sayle plots. These are dealt with in detail in the appropriate sections. The remainder of the structures are addressed in a lesser level of detail. Each of these structural entities has been given an identity number; the frontage buildings have their street number (shown as **No. 12**, **Nos. 13-25** etc.), the remainder are numbered from **40** onwards without a prefix. These numbers appear in bold. The location of these structures is shown on Figure 12.

Given the passage of time between the recording work being carried out and completion of the report, that some elements of the structures still stand though the majority has been demolished and that the retained elements have seen varying degrees of alteration, the decision has been made to use the present tense when describing structural elements throughout.

Background

(Figures 1-11)

The story of this city block is not just the story of Robert Sayle's department store, far from it, but the development of this one store has had a significant effect on the later history of the area and the way in which parts of it developed and altered – the period of time of most significance in this report. Robert Sayle opened his shop at **No. 12** St Andrew's Street (Victoria House) in 1840. Over the next 164 years the store developed and expanded until by the time it removed, temporarily, to Burleigh Street in September 2004, it occupied **Nos. 12-17**, **18/19**, **24** (part) and **25** St Andrew's Street as well as much of the ground and buildings, between them and St. Tibb's Row. As the report will show in some instances this had involved major structural alteration and rebuilding and in other places almost none at all. This report is chiefly concerned with the physical record of the buildings as they stood in late 2004, but future study will more closely examine the relationships between those structures and the people that lived and worked in them in particular the influence of the Robert Sayle store itself (Cessford and Dickens forthcoming).

The Robert Sayle store retained the name of its founder for 167 years until the move back to St. Andrew's Street in November 2007 when, in keeping with national policy, all John Lewis stores lost their local names and the store reopened as John Lewis, Cambridge. In those intervening years the store had several owners: from 1840 to his death in 1883 Robert Sayle was sole proprietor; from early 1884 ownership was transferred to Robert Sayle & Co. with three individual partners; in August 1919 the business became a private company, Robert Sayle & Co Ltd.; in November 1934 the business was sold to Selfridges' Provincial Stores (SPS) who sold on in turn to the John Lewis Partnership in February 1940 (Sieveking & Gooch 2004: 123). Each of these ownerships made an impact on the fabric of the store.

Before 1979 non-Robert Sayle related structures occupied 33% of the ground between 12-25 St. Andrew's Street and St. Tibb's Row, by 1988 that had shrunk to only 17%. The more important distinction, however, is between the structures of the main store to the rear of 12-17 St. Andrew's Street (almost 59% of the area), which was the focus of the realization of "Robert Sayle" as a purpose built retail entity.

Detailed documentary study is ongoing as part of the broader archaeological project and has been referred to in this report where appropriate. Ownership of the many plots comprising the block was complex: **Nos. 12** and **21** were owned by Emmanuel College, **Nos. 13 – 20** by Jesus College and the remainder a mix of private, College and City Council ownership. The Robert Sayle store leased the land on which the shop stood for the entire time of its operation at St Andrew's Street, another factor which affected the way in which the store and the block were able to develop over time.

The Building Survey: Results

No. 12 St Andrew's Street and behind (40, 41, 58, 59, 60, 66, 92) (Figures 13-20)

No. 12 St Andrew's Street consists of a basement and four floors. This is the location of the original Robert Sayle store, called Victoria House, but is not that original building. Although largely untouched in Robert Sayle's lifetime documentary and photographic records show that around 1905 it was demolished to ground level and entirely rebuilt. Subsequent expansion extended the structure back from the frontage on the ground and first floors, the second and third floors remain contained within the frontage bay.

Strictly speaking **No. 12** is only the first bay adjoining the street, however the building is constructed and organised in such a way that it is very difficult to separate out the individual elements. Subsequently the group is described together with the structure numbers inserted in brackets where appropriate.

Exterior

Street Frontage Date c. 1905 (Figures 14 & 16)

The front of **No. 12** rises four floors from street level. Any original features surviving on the ground floor are entirely obscured by the modern shop fascia. The façade is constructed from yellow/white hand-made bricks measuring $8^7/_8 \times 4 \times 2^3/_4$ inches. They are laid in English bond with heavy stone "long and short" quoins at each end of the façade. There is a single broad stone course towards the top, immediately beneath the brick parapet in front of the third floor dormer windows.

The first floor has five decorated arched windows, the central one being larger than the others and with a decorative bead set inside the pane. The architrave of the arch has a moulded outer lip and a plain inner moulding in a grey stone; between these is a band of floral (acanthus?) motif moulding in stone (or possibly ceramic) of dull orange. Above the central window is a "keystone" with a scale or leaf relief pattern within a plain square border. Again, it is unclear from ground level whether this is moulded ceramic or carved stone. An early 20th century hydrant plaque is located between the second and third windows on the first floor

CWW H 13FT.

The second floor has three arch-headed windows positioned equidistantly above the five on floor below. These have stone window sills, slightly arched heads and large-pane sashes. Below the ends of each sill there is a decorated block in the same material as the keystone above the central window on the floor below (Figure 16.3). The blocks have a hexagonal relief motif within a plain square border.

The third floor has three dormer windows set into the slated roof.

Rear Aspect (Figures 14 & 16)

The rear wall of **No. 12**, visible only at second and third floor level, is constructed from yellow/white hand made brick $(2\frac{3}{4} \times 8^{7})_{8} \times 4$ inches) set in English bond. On the second floor the three windows have stone sills, a slightly arched head with an irregular bow and large-pane sashes.

On the third floor the three windows are immediately below the roof line and set in simple lintel headed square openings with stone sills. The left and right windows have metal-framed casement windows with eight panes on each side. The central window is also a metal-framed casement but with two large panes. Photographs from the late 1960s show that at that time the middle window matched the other two (Figure 73).

There is evidence of a blocked doorway at the north end on the second floor. The present doorway out onto the roof has been inserted after the original build. It has a large concrete lintel.

The rear elevation has a single stack, off-centre between the north and middle windows. The upper two-thirds of the stack are built in stretcher bond contrasting with the English bond of the main wall. This appears to be a deliberate contemporary change in bond style. The chimney top carries four ceramic pots.

Roofscape

The roof of **No. 12** proper is slate covered. The front part has a double-pitched mansard form with three dormer windows projecting. These have slate catslide roofs. The windows are simple large-pane wooden casements. The rear roof has a single pitch from the ridge to

immediately above the third floor windows. A tall stack rises above ridge height on the northern edge of the eastern side of the roof. It is constructed in mixed brick including reds as well as yellow/whites. Although this must be the stack to the first floor fireplace, it seems likely that it was rebuilt at the time of the construction of the Post Office building next door in 1934, so as to clear that building's parapet. It has a moulded stone top and two ceramic pots.

To the rear of **No. 12**, covering **40** and **41**, is a long flat roof covered in asphalt. The roof is interrupted by three light wells with pitched glass roofs. The largest of these, to the west, has a metal-framed window set into its solid east face. Behind this the roof level rises again to accommodate **58**, a third floor modern office built of re-used brick. The roof is slate hung on slight slope to east and west. There is a north-south roof light in the southwest corner and a red Fletton-brick tower at the head of the stairs. **59** is a modern cloakroom off **58**, constructed from re-used Cambridge bricks.

Interior

(Figures 13, 17-20)

Basement (Figure 17.1, 17.2)

Floor to ceiling height 2.02m

The rear three bays have four large transverse beams then one further bay to two large supporting brick piers from which run two west-east beams. A north-south beam runs below the back of the front range then an east-west beam on a slightly different alignment. A narrow bay, the width of the property, extends below the street. From **40** (ceiling height 2.20m) the floor ramps down to **43**.

The basement walls are constructed from brick in English bond. The front (east) part, up to the large brick built piers, probably represents the earliest surviving part of the **No. 12** basement, the remainder being piecemeal expansion to the west. There is no indication that the front part of the basement is particularly old, however, although it is possible that it belongs to the pre-1905 building. In the absence of observable evidence in the structure itself, a 1938 plan of the building indicates that the rear part of the basement (**40**) did not exist at that time and is a mid-late 20th century addition.

Ground Floor (Figure 17.3-17.7)

Floor to ceiling height at front is 3.82m, 500mm lower than Structure **40** to the west. The ceiling has small square panels with inset lights.

In the large bay at the west end (58) is a long beam with supports. East of this are nine beams supported to the north on half-piers and to the south on piers, forming 10 bays (41). The beams are flat on the underside with a small moulding on the face then a moulded cornice round each bay. The walls of 41 are constructed from yellow/white brick; the bond pattern was not visible due to a plaster covering. The north wall is pierced with a series of openings; at the west end as a well-formed double arch; elsewhere as plain openings between the existing brick piers. Towards the front (east) end, within 40, is a staircase rising to the first floor. This has an elaborate wrought iron balustrade, with a gilded escutcheon within a diamond-shaped pattern formed by straight bars and a brass handrail. There is wooden panelling below. As recorded, this staircase made a straight descent from a halflanding down to the ground floor; however, close examination suggested that it had been altered. Old photographs confirm that this was indeed the case and that until the 1960s or 1970s the staircase had made a curving turn through 90° at its base. At some stage the balustrade had been cut and the stair reorientated to its present position with the curve removed. The staircase appears in photographs of the 1930s and probably belongs to an early 20th century design scheme. The ceiling is plaster with large beams with cased supports to 41. Height here is 3.79m.

The front part of **No. 12** has been significantly altered, principally in 1970, when the 1930s arcade which had replaced the original 1905 design was removed and replaced with the flat front and display windows of the modern shop. Little evidence of the earlier arrangements survived.

First Floor (Figures 18 & 19)

Ceiling height at the front 3.77m.

The eastern, front, wall has five round-headed windows; the windows open by rotating about a vertical catch (Figure 18.1). The plaster ceiling is flat with a large moulded cornice. The walls were plain plaster, which in recent times were mostly hidden behind lining screens. In the south wall is a large arched opening through to No. 13, neoclassical in style with recessed moulded panels and egg and dart decoration on the impost (Figure 18.6). There is moulding around the architrave and a keystone in plaster and wood at the apex. In the west wall is an opening through to 40, again with a keystone arch. This is narrower than the south arch, as the wall is less thick, but is in the same style with recessed moulded panels and egg and dart decoration on the impost. To the left of this arch was an apparently blind niche (hidden behind modern shelving). When fully exposed, this proved to be a blocked up window with a glass pane still in situ (Figure 18.5). A slight stack projection in the north wall contained a brick built fireplace marked Bratt Colbran & C • L, London (Figure 18.4). Bratt Colbran & Co. of Finsbury, London, were a firm of ironfounders who specialised in gas fires in the 1920s. They also produced a small range of hand-painted 3" tiles, most of which were decorated with simple blue-painted figures and landscapes reminiscent of Dutch tiles. If this fireplace had been decorated with such tiles then no trace remained. On the left- and right-hand sides of the fireplace were remains of a wallpaper scheme consisting of a brown flower motif set within squares.

Passing through the western arch into **40** to the left in the southern wall are two arched openings, again in the same style as those in **No. 12** (Figure 19.3). These lead in to **66**, which is described below in **No. 13-15**. In the wall above these openings, however, are the remains of two different keystones. To the west is a third, but this one is part of an intact half-moon window set in the upper part of the wall. A photograph dated 1933 (Figure 72) shows three such windows and no full-length openings in the wall indicating that this is a mid to late 20th century feature made in imitation of the existing arches.

On the north side is the upper wrought iron balustrade and brass handrail of the stairway to the ground floor (Figure 19.4). As this turns northwards, it is replaced by one of plain board. There is a ceiling light allowing daylight to the stairwell from above. The ceiling beams (seemingly steel coated with plaster) carry a Greek key motif along their upper (ceiling) edge with a flat soffit and a small moulding on the lower face (Figure 19.7). This pattern continues around the sides of each bay and sub-bay as a cornice. It is possible that the larger beam at the point between 40 and 41 represents the line of an earlier rear wall, but there was not enough information to confirm this. The ceiling height in 40 is 3.62m.

Moving westwards into **41**, the pattern of 10 bays as seen on the ground floor is repeated, the Greek key pattern on the north-south beams and around the bays extending down the length of the range. The southern wall of **41** is solid for five bays; beyond this point it is open through to the rear of **No. 13-15** with piers supporting the southern ends of the ceiling beams. Within **41** three of the larger bays have ceiling lights letting in daylight from light wells on the roof. Again, the 1933 photograph indicates that there were corresponding openings in the floor, each protected by a decorated balustrade matching that of the staircase, allowing daylight to the ground floor. No trace of these light wells was observed in the floor of the first floor or the ceiling of the ground floor.

Second Floor (Figure 20)

Ceiling height 2.96m.

The second floor of **No. 12** is accessed via a corridor within **No. 13-15**. This floor is divided into five areas, four being small rooms off a small corridor, most recently used for storage. The fifth area has the base of the stairs rising to the third floor (Figure 20.1). The northernmost room extends from front to rear. It has an arched large-paned sash window to the street (east) side with three horizontal metal bars on the inside (Figure 19.2). There is a moulded picture rail and a simple skirting around all the walls. There is no cornice. The door is in the south wall. The west wall window is blocked on the inside, but external observation showed it to be a simple two-pane sash. The other two rooms with windows to the street (having the same arched large-paned sash but without the metal bars on the inside) are similar but neither has a picture rail. The rear room is plain with a simple two-pane sash in the rear (west) wall. All the doors are modern fire-doors, but there are older ogee architraves to doors and windows.

Third Floor

The third floor is accessed from a staircase from the second floor, the rooms sit within the roof space. Again this floor has been divided into small rooms housing offices and electrical/computer switch rooms. There is no evidence remaining of original internal features. Windows to the front are dormer with two-pane casement type windows (Figure 20.6). The northern and southernmost of the rear windows are metal framed 16-pane (eight each side) casements, the middle window is a simple two-pane casement. All doors are modern fire doors.

Discussion

Although the earliest building to be acquired, No. 12 was the last of the Robert Sayle frontage sequence to be rebuilt and has been significantly altered in places since. The ground and first floor interior match the existing decorative scheme in the rest of the shop (c. 1898 see below), however the decoration in the front of No. 12 is much simpler in execution than that in the rooms to the south (see below Nos. 13-15 and 16-17). Also unique to No. 12 (again only at first floor level) is the patterning seen through the arch into structures 40 and 41. These are features and a style not seen anywhere else, specifically the Greek key frieze around the bays on the first floor which, compared to some of the plasterwork elsewhere, is rather crudely executed. It is possible that these differences reflect in part the different ownership of the plots (No. 12 was owned by Emmanuel College, most of the remainder by Jesus College) and perhaps the later date of the No. 12 rebuild. westernmost extension of 41 was not added until the 1970s, but it is interesting to note that the Greek key pattern motif is continued right to the back. The door openings from 40 through into 60 (see below), replacing the earlier windows, have also been decorated with the arch and keystone design seen across the first floor front. This work must date to after the 1930s, quite possibly to alterations made after the transfer to John Lewis in 1940, but still the original scheme has been faithfully copied.

No. 13-15 St. Andrew's Street

(**42**, 43, 53, 55, **56**, 57, 61, 62, 63, 64, **65**, 67, 86, 87, 88, 89, 90, 100, 101, 102, 103) (Figures 21-40)

Nos. 13-15 St. Andrew's Street stand on land until recently owned by Jesus College. The Robert Sayle store was gradually expanded into these properties as leases fell vacant, with **No. 13** acquired in 1851 and **Nos. 14** and **15** by 1865 (Sieveking and Gooch 2004: 24). Originally three separate buildings, this was the one part of the store significantly structurally altered in Robert Sayle's lifetime. Between 1876 and around 1880 the buildings were entirely rebuilt to give a new front of four storeys and a basement.

As with **No. 12**, **No. 13-15** is strictly speaking the front part of the building only. Some of the spaces behind, specifically **43**, are contemporary with the late 19th century rebuilds; however, others are later extensions or represent the absorption of previously existing structures into the expanding shop, *e.g.* **55**, **57** and **64**. Unlike **No. 12**, the rear of **No. 13-15** includes three distinct structural entities. These (**42**, **56** and **65**) will be discussed in greater detail than the simple component elements.

Exterior

Street Frontage
Date c. 1876-1880
(Figures 25, 27, 30)

From street level **No. 13-15** rises to four storeys. The original ground floor was completely altered in 1970 with the replacement of the arcade with a modern shop front, facia and, in the 1980s, a canopy. Above this, however, the building appears much as it did following the late Victorian rebuild. The entire front face is covered in stone, giving no indication of the underlying construction method.

On the first floor are four sets of windows, consisting of a central two light casement with two smaller square lights above, with two single-pane lights either side, again with a smaller square pane above. The sidelights are separated from the centre by ornate stone mullions; these have a recessed panel on the face with a vertical coin moulding. At the top of each mullion is a carved console, supporting the slight parapet of the floor above. The cyma is decorated with egg and dart with acanthus leaves below a small fillet. The main body, with a deep symmetrical moulding has an ogee curve ending in a volute. This again sits above acanthus leaves. The inner face of the window architrave is plain, with a simple rebate around the front edge. Outside this a moulding, on the sides fixed to the mullions, is decorated with egg and dart. Above each of the larger central lights is an ornate blank cartouche with elaborate fronds rising from the base (Figure 20.6). Between each set of windows is a double width mullion with two consoles at the top and a broad elaborate garland of flowers and fruit (Figure 20.3). This double console and decoration also appears at each end of the facade.

The second floor also has four sets of windows with a similar distribution, each aligning directly above the ones on the floor below. These do not have the smaller upper pane, and are slightly shorter in height than those on the first floor. Here the intermediate mullions are marked with engaged columns with a smooth round shaft, attic base and volute capital, the sides splayed forward in the Roman style. The design is basically lonic but with a smooth rather than the more usual fluted shaft (Figure 20.5). On the frieze above each of the columns is a wreath, and at the top of the frieze a band of egg and dart. Between the window sets is a square-sectioned mullion with a recessed moulded panel on the front face but no

internal decoration. The slight parapet on the floor above these windows has uncut modillions beneath it and above the egg and dart. Outside each of the windows is a wrought iron balcony the wider ones outside the central window of each set having a more ornate central decoration (Figure 20.2).

The third floor has four dormer windows set into the vertical slate hung face of the roof. These are elaborate in form; the windows themselves of casement type with two lights in the centre and two narrower ones either side. The whole is set in a heavy wooden construction with recessed panel, decorated mullion and an architrave with a wide frieze topped by a semicircular segmental pediment. In front of the windows is a heavy stone balustrade with bellied balusters in front of the windows themselves with broad tripartite pedestals in between. A heavy moulded cornice tops the balustrade.

Rear Aspect (Figures 26, 28, 31)

The back wall of **No. 13-15** is constructed from $2\frac{1}{2} \times 8^{5}/8 \times 4$ inch grey bricks, probably machine made with a slightly sandy face. These are laid in English bond. The rear wall is only visible from second floor height and is largely obscured behind **43**. As at the front, the third floor windows are within the roof-space, though the dormers here are much simpler with flat roofs.

Behind **No. 13-15** is the upper part of **43**, built to accommodate the high ceilings beneath. At the south end is a skylight providing the light to the dome over the main staircase (see below, first floor).

Roofscape

The roof levels vary considerably behind **No. 13-15**, reflecting the piece-meal nature in which parts of the structure expanded (Figure 31.3). The double pitched roof of **No. 13-15** itself, in effect a mansard roof without the gable hipping, is slated and carries five stacks: two on the north gable, the eastern one possibly shared with **No. 12**; two opposing on the front and rear a little over half way along; and a large stack straddling the lower street part of the gable position between **No. 15** and **No. 16**. This again seems to be shared, and probably more correctly belongs to **No. 16**. This large stack is constructed from nine interleaving bands of brick (five courses in stretcher bond) and stone with eight square pots. The smaller stacks are built of brick only and all show signs of having been rebuilt. The smaller square ones have four round pots set in square, the one on the rear side of the gable has three remaining pots, though clearly more, perhaps five, in the past (Figure 31.4).

As described above, the roof of **43** carries the skylight for the main stair dome at its south end. West of **43** is the sun terrace, a flat slabbed roof on an upward extension of **63** built in the 1980s. From here the roof level drops down a floor, forming a well in which sit the glass skylights serving the lights on the ground floor, **61** and **88** (Figure 31.5; see below, ground floor). Behind this well is the 1970s asphalt roof of the later extensions. Built above this is **57**, the staff Social Club, a small modern "porta-cabin" like structure with a flat roof and slated walls (Figure 31.6). Behind this again, the roof is a modern flat asphalt, with the exception of **56**, described separately below.

Interior

Basement (Figure 32)

Floor to ceiling height 1.39m.

On the 1938 plan of the store the **No. 13-15** basement extends as far only as the rear wall of **43**. Its subsequent expansion, more than doubling its size, is later 20th century in date indeed the westernmost expansion took place in 1974 by burrowing sideways from within the existing space. The modern sections of the basement are built from a combination of concrete blocks

and brick. All the brick walls in the main cellars are painted, creating difficulty in identifying brick types.

Beneath **43** the basement is brick built, with the brickwork laid in English bond. Later openings have been cut through to the extended basement to the west and also through to the basement of **No. 12** where there is a slight slope down to a lower floor level. Descending to the basement at the south end is a curving open-newel flight of stairs with a decorated balustrade. The newel post is square in section with a square moulded cap and a carved margent (vertical string of flowers) detail in a recessed panel on three faces. The handrail has a moulded section, but the balusters themselves are of a simple square section (Figure 32.4).

Beneath **No. 13-15** the basement is brick-built in English bond, as the walls are entirely painted the brick type is not known. The east, street side, wall curves outwards towards the street, presumably forming a relief arch to support the weight of the façade above. This is supported at intervals by integral brick half-piers. The southern wall is pierced by two openings, both small and clearly "punched" through the wall at some point after its construction. The west wall is pierced by three openings, leaving two large brick piers with short wall stubs attached, supporting the ground floor above. The north wall has a small fireplace in a slightly protruding stack between two brick half-piers. Although in modern times the basement floor had clearly been treated with bitumen to waterproof it, in some areas, particularly in the corner between the south and west walls, small areas of the original wood block floor survived, although water damaged (Figure 32.5).

Beyond the south wall, through the later openings, the basement area has been extended in to the area beneath the former passageway between **No. 15** and **No. 16**. This has exposed the outer surface of the walls, particularly for **No. 16**, which will be described later. Unfortunately, the outer surface of **No. 15's** walls were subsequently plastered and no useful information can be derived from them. One thing that should be noted is that this expansion was, again, clearly on an *ad hoc* basis. The floor above was in several places supported only on inserted steel pillars with shims of wood and other materials pushed in to fill the gaps between the ends and the floor above. As elsewhere throughout the basements, this area was crammed with storage shelving prior to clearance.

The central area of the basement beneath the old passage is taken up with a modern platform lift. Beyond that is a corridor leading to the kitchens, entirely tiled with heavy duty white glazed tiles revealing no information about its construction. The basement below **42** is described below.

Ground Floor (Figures 33, 34, 35)

Ceiling height 3.59m.

As in **No. 12**, the front part of the shop was much altered by the 1970 change from the 1930s arcade to a modern flat façade with fascia (Figure 33.6). Some features from the late Victorian rebuilds, however, do survive.

The foundation level of part of the arcade structure was exposed beneath the floor of the modern window bay (Figure 33.4). This was constructed in un-frogged yellow/white brick laid with a simple stretcher bond on the inner face and header bond on the outer, presumably creating an English bond on the vertical faces, although in a 14" rather than the usual 9" wall.

The wall-line of the upper floors is supported on large brick piers at the south end and a series of riveted vertical steel girders cased in board, forming pillars. The girders appear to be contemporary with the main 1876-1888 rebuild and have the name "Homan & Rodgers" stencilled on them (Figure 33.5). Homan & Rodgers were a firm of structural engineers involved in the early development of steel-framed buildings, producing a handbook on the subject referred to in *The Structural Engineer* in 1909 and 1921.

Moving westwards into **43** (ceiling height 3.83m), here survive some of the most characteristic features of the Robert Sayle store, which, based on archive plan evidence, date to the slightly

later reconstruction phase between 1888 and 1898. In the southwest corner the main curving staircase sweeps down from the first floor. The staircase completes a full 180° sweep between the ground and first floors. The form is a closed string stair with a plain string. The balustrade on the inner, open, side consists of a square newel decorated with a margent in a moulded recessed panel on three faces. The balusters have squared tops and bottoms with a turned central section. The balusters are set in groups of four, separated by a broad baluster with a more elaborate margent set in recessed panels on the inner and outer faces (Figure 34.3). The handrail is heavy, square above the newel, with a moulded section and slightly curved upper surface. The balustrade on the outer, wall, side is closed with moulded recessed panels beneath a matching handrail. The newel is also matching but with the decoration on two faces only as the third is to the wall. The underside of the stair is also decorated, this time with applied moulding forming rectangular panels. From the underside of the stair, a short length of balustrade joins this section of the stair to the upper newel of the flight down to the basement. The length on the ground floor matches the main stair. The descending flight to the basement is similar but with plain square balusters (see above). (Figure 34.5). The curving wall encasing the stair has a series of large and small niches in pairs except at the base where there is only a single large niche. Immediately north of the foot of the stair is a large arch through into 63. This rises almost to ceiling height, the decorative keystone touching the ceiling at the top. The arch has a simple square section on the lower part, with a double moulded impost below the semicircular top. This upper section has a simple moulding. A photograph from 1924 shows that this archway was originally a large doorway, the "double impost" marking the point at which the cross bar above the door divided it from a large fanlight. This was the entrance into the Old Counting House (part of the 1889-1898 phase). To the north of the archway is a broad opening which is a modern feature. The same 1924 photograph shows, however, that beyond this used to be a single square bay with a wall at the west end. This wall has subsequently been removed. The pier between the arch and the opening is decorated with moulding at the top and base reminiscent of the decorative scheme on the first floor (see below). The ceiling of 43 is divided into squares by north-south and east-west beams. These have moulded sections, which above the arch form a cornice. In the modern shop layout much of this detail was obscured by later pipe-work and lighting fixtures.

To the south of the stair, a modern door has been inserted to give access to a stone staircase behind (90). Immediately south again, in what had recently been a washroom, an external door, panelled with wood and glass, was revealed in the north wall (Figure 35.1). This would have given access to the same staircase from the alleyway between No. 15 and No. 16, it being finally closed off and the front part incorporated into the shop floor in 1953 (Sieveking and Gould 2004: 75).

Beyond **43** the shop extends westwards, though it is narrower to accommodate **42** to the south. The first bay (below **63**) is quite plain other than for the rear of the archway through from **43**, the decoration of which matches the east face (Figure 35.2). The next bays, **62** and **88**, contain skylights. **62** in particular has a large skylight over a semi-circular space, with two intermediate ribs (Figure 35.4 & 5). There are large piers at the southeast and southwest corners of the skylight. The height under the spine of the curve is 3.73m, with a general ceiling height of 3.20m. The much smaller light well (**88**) is flat at ceiling level, with two cased north-south beams cutting across the skylight (Figure 35.3).

Beyond **62** and **88**, much of the rest of the structure represents consolidation and expansion during and after the 1970s (Figure 35.6). Most of the individual buildings in this area were demolished and a purpose-built steel framed modern construction replaced them. The exception to this is **56**, which is described separately below.

First Floor (Figure 36, 37, 38)

Ceiling height 3.75m, under beams 3.39m.

Unlike the ground floor, the first floor retains many original features from the Victorian rebuild and the pre 1889 decorative scheme, although in the modern shop little of it could be seen behind displays and shelving (Figure 36.1). In the east wall are four large rectangular

casement windows, each consisting of a large double-paned central light with two smaller ones to either side separated by broad mullions, each light having a smaller square light above (Figure 36.4). The two central lights on each window open on a vertical hinge; some of the upper square lights open on a horizontal hinge on the lower edge and are constrained by a curved bracket.

The walls are decorated with large rectangular plaster panels and there are arches to **No. 16/17** (Figure 36.6), **43** (two; Figure 36.5) and **No. 12**, with keystone and plaster swags in spandrels (Figure 37.5). Above each keystone was a cherub head with wings to either side. Unfortunately these were removed by shop staff during the store clearance and could not be photographed *in situ*. Both the arches and windows have recessed-moulded architraves. The ceiling is plaster panelled with three main east-west beams and two lesser north-south beams between them. There is a cornice, consisting of a moulding above dentilation above egg and dart above a moulding, which continues around the edge and the main beams (Figure 37.6). Under each end of the east-west beams is a double corbel with acanthus motif (Figure 37.7), below which is a narrow moulded plaster panel. The panels are the front part of a casing around the steel pillars running to the floor below. At the base of the wall a moulded skirting runs around the edge.

Moving through the arches into 43 (ceiling height 3.77m), again the decorative scheme is well preserved. In the east wall are the other side of the two arches through from the front. The arch form is the same but the spandrels left and right of the keystones have a decoration of plaster wreaths (Figure 38.2 & 3). To the south is the head of the main staircase. The upper balustrade has two groups of 13 balusters separated by blocks similar to the newel posts, although these have the margent motif on all four faces (Figure 37.1). At the head of the stair the balustrade sweeps down in the four and one pattern described earlier (Figure 37.2). Behind the stair the wall curves round 180°. There is a moulded rail at the height of the upper baluster rail; above this are five large square panels with four smaller rectangular ones in between. The plaster moulding around the panels itself has a stylised floral motif. Above the stairwell is a large glass dome with a chandelier suspended from its centre. The dome is divided into 12 segments by ribs, each segment with one of two alternating designs in leaded lights broadly reflecting, though not identical to, those on the staircase below (Figure 37.3). Below the dome the opening is decorated with an egg and dart border above an intricately moulded plaster frieze. The ceiling has two curving triangular panels and a dentiled cornice, which continues around the whole space. The chandelier, although superficially ornate, is actually quite simple, consisting of six arms linked by strings of beads with central pendants. Below the centre is a small decorated bowl, at the top a series of hanging pendants linked again to the arms by strings of beads (Figure 37.4). The west wall continues the pattern of large square and smaller rectangular panels along its length, although here the lower half to two-thirds have subsequently been removed. In the north wall are two further arches and the square-headed opening which led to the ladies' fitting rooms. The arches have moulded architraves and keystones as before but the spandrels are blank (Figure 38.1).

Through these arches is **66**. As presently arranged this has two arches in from **43** and two out to **40**, all of which are of the standard pattern with moulded architrave and keystone with plain spandrels, and all of which are smaller, in both height and width, to those in the walls to **No**. **12** and **No**. **13**-**15**. As already described in **40** and **No**. **12**, however, it is clear that this is a relatively modern arrangement, certainly post-dating the mid-1930s. There is a blocked window in the wall to **No**. **12**, visible on this side only as a mark in the plaster, and three blocked or removed windows in the upper wall to **40**. This area formerly acted as a light well bringing light through to the ground floor and windows certainly to **No**. **12** and **40** and presumably to **43** although that is now obscured. It almost certainly belongs to the 1889-1898 phase of works. When it was closed in, the decorative scheme that already existed was copied, but this did not go so far as to add decoration to the spandrels.

The remainder of the shop floor west of **43** and **66** can only be accessed via **40** and **41**, behind **No. 12** (Figure 38.4 & 5). Most of this was built in the 1970s as described above. The exception is **56**, which is described separately below.

Immediately west of **43** and **66**, is **63**. At this level it was used as a staff restroom (Figure 38.6). It has three three-light metal windows in the top of the west wall, a plain ceiling with two east-west beams and plain walls.

Second Floor (Figure 39)

Only No. 13-15 rise above first floor level. This part of the store, part of the 1876-1880 rebuild phase, was originally built and used as staff hostel accommodation, with some alterations to the layout in the 1934/5 phase of works. Since that ceased in the mid-1960s, this and the floor above have been converted to office and storage space. The offices are arranged to the east and west of a central corridor (ceiling height 2.64m), interrupted with modern fire doors (Figure 39.4). At the north end of the corridor the floor level ramps up to meet the level of **No. 12**. The doors to the rooms are four-panel, moulded on both sides, some with six-pane lights above, indicating their original positions; the others are later insertions. The original doors also have moulded architraves on both sides. There are five offices on the east, street, side. These have between them the four large windows, consisting of a full height two-light sidehung central casement with two narrower full height lights on either side. The original arrangement appears to have been two or four rooms either side of a large central stack, each having one or two of the windows. There are also stacks at each end. The subdivision into smaller rooms was later and by simple stud walls (Figure 39.1, 2, 3). A moulded cornice runs round at ceiling level between the now blocked fireplaces, interrupted in places by later inserted stud walls (Figure 39.5). Some rooms have a picture rail, otherwise there are no internal decorative features beyond a simple skirting.

On the west side of the corridor the space is divided into six small rooms (Figure 39.6 & 7). The windows vary in style. At the north end, behind 43, are two modern replacement two-pane casements, at the south end a single two-pane sash. Overlooking the alleyway are two two-pane sash windows, one jutting out in the angle between 90 and No. 13-15. There is no cornice in these back rooms.

Third Floor (Figure 40)

The third floor of **No. 13-15** has been subdivided in a similar way to the floor below, with the rooms off a central corridor, ceiling height 2.87m (Figure 40.4). Here also some doorways have six-pane rectangular lights with ovolo glazing bars above the doors and the corridor appears to be an original feature. The doors are four-panelled with plain architraves. Later inserted doors do not have the light above. Again, the original division on the street side was as four rooms either side of the central stack, each with a set of windows and a door with a six-pane light at each end. The windows are casement type with two lights of three panes each in the centre and a light of three panes to each side, separated by a broader mullion. All the windows are square topped internally and plain. The current arrangement is as five rooms, the stud walls of which interrupt the window spaces in each case (Figure 40.1, 2, 3).

On the west side of the corridor are four rooms, one large and one small north of the access to **90**, two small ones to the south. In the larger room are two dormer windows, each consisting of two two-light casements, with three panes in each light (twelve panes in all). There is a stack at each end of this room and a picture rail around all walls. It seems that this room best retains the features of the hostel rooms, though it would have been divided into two at the point indicated by a wall scar on the floor (Figure 40.5). Next door is a smaller room, again seemingly retaining its original layout, this one presumably a single room (Figure 40.6). The original layout of the room(s) immediately south of the **90** access is not clear. The current arrangement has an awkward dog-legged stud wall splitting the two-light casement in the middle. It is likely that it was another hostel room.

Discussion

13-15 St. Andrew's Street was the only part of the store substantially redeveloped during Mr. Robert Sayle's lifetime. Starting in 1876 they were entirely rebuilt to give a new front of four storeys and cellars. The original arrangement was millinery showrooms and workrooms in the basement, showrooms on the ground and first floors with bedrooms for shop staff on the upper two floors (Sieveking and Gooch 2004: 25). Other than the loss of the basement workshops and the change from bedrooms to offices, that layout is broadly reflected in the structures as examined.

Behind the mask of the classically influenced stone façade, it seems that the structure was actually state of the art for its day. The use of a riveted metal skeleton (iron or steel) in commercial buildings in England was relatively rare, even into the latter years of the 19th Century (Addis 1997: 106). Homan and Rodgers (the name painted on structural elements within 13-15) produced "Homan's fireproof floors" and offered "constructional steel and ironwork. roofs, piers, bridges, joists and girders and concrete floors" and after 1897 "constructional steel skeleton buildings (American System')" (ibid). According to Bill Addis "despite these many early, but modest uses of steel and concrete, the first large steel frame buildings were not built in Britain until the last few years of the century" (ibid). In the Architects & Contractors Handbook and Illustrated Catalogue of Materials and Manufactures of 1883 the Homan & Rodgers advertisement declared that "The use of rolled iron to a great extent supersedes wrought-iron built girders for ordinary construction, on account of less cost and the numerous sections, which meet the requirements of length and load. A method of riveting one girder upon another was patented by Mr. Homan, whereby a great amount of additional strength is obtained, in the part weakest" girder usually the (http://www.archive.org/stream/ architectscontr00mathgoog/architectscontr00mathgoog divu.txt). date and form of the metalwork observed in the building, it seems likely that this was the method employed at Robert Sayle rather than the steel based system introduced some 15 or 16 years later. According to the History (Sieveking and Gooch 2004: 25) the total for the works, including fittings, new kitchens and stables had a total cost around £3,500 (around four million pounds today by some calculations).

The internal fittings and the expansion/extension to the west, however, appear to belong to a slightly later phase of work. This is discussed under No. 16/17 St. Andrew's Street (below).

Structures 42, 61 and 65

(Figures 41-52)

42 is a free-standing structure linked to **No. 13-15** via a later stair block (**90**) with openings through to later structures around it. The building predates the Robert Sayle rebuilds of the 1870s and later. It appears on a plan of 1862 and almost certainly on a plan of 1792. Although the precise construction date is unknown, the plans and style allow for a likely time in the 1780s or 1790s.

This confirms the view that it was a building taken over by rather than built by Robert Sayle, who only took over the lease on **No. 15**, behind which it is located, in 1865, at least 75 years after its likely construction. **65** is probably contemporary with **42**, although it has survived in a rather more altered state. This building again appears on the 1938, 1862 and 1792 plans. Originally of ground and first floor only, the roof was probably removed as part of the 1970s construction work and a flat-roofed second floor added. According to the 1792 plan **65** is described as "Mr Butcher's Office" and on the 1862 plan is labelled as "Offices". **42** is referred to as "Kitchens" on the 1862 plan.

Exterior

(Figures 43-49)

42 rises four storeys above the former alleyway between **No. 15** and **No. 16**. The south wall is constructed from $8\frac{3}{4} \times 4 \times 2\frac{3}{4}$ inch hand-made bricks laid in English bond. On the north side most of the wall is obscured by the weather-boarded face of **61**, an external stair (Figure 49.2).

On the ground floor south side of **42** are five double-hung sash windows, all with three panes above and below. At the western end part of the wall, formerly a large opening (into a passageway under the first floor according to the old plans) with a heavy wooden lintel still in place, has been infilled with reused brick and a modern metal framed casement window inserted. To the west this line continues as a wall built in hand-made bricks, $8^5/_8 \times 4^3/_8 \times 2^3/_4$ inches, laid in English bond. This wall rises two stories high and is the remains of the building immediately west of **42**, namely **65**. The southern elevation of **65** is blank other than for a late door inserted in the southwest corner. There is some evidence for blocked openings on the ground floor but their original form cannot be made out.

At first floor level on the south side at the western end of **42** are three small double-hung sash windows with two panes above and below. East of these, in the centre, is a large double-hung sash with a single-pane above and below with side lights on either side of the main window. East of this is a set of three double-hung sashes, all within a single opening of a lesser depth. These two are the windows of the first floor dining room. The first floor of **65** again appears blank, with no indication of infilled openings.

On the second floor of 42 are six double-hung sashes with six panes above and below and a small metal-framed casement inserted into the stack between the westernmost and next windows. The second floor of 65 is flat roofed and was constructed in reused Cambridge bricks c. 1972.

On the third floor, set into the roof space, are five small dormers with cat-slide roofs and horizontal opening hinged windows. It is possible that a sixth dormer has been removed above the flue outlet from the kitchen. The southeast corner of **42** has been rebuilt in a slightly different brick to accommodate the insertion of **90**, the stair block.

The south face of **42** has two slightly protruding stacks situated between the first and second, and third and fourth windows from the west respectively. These only begin at first floor height and extend beyond the roof ridge. The western one has four square pots, the other only has two round pots remaining.

The northern side of **42** is entirely obscured below the second floor and further interrupted by later features higher up. Dominating the east face is the weather-board cladding of the external staircase **61**. This extends from the first to the third floors, with two double-hung sashes at first and second floor level and a single one set in the gable on the third floor. These all have three panes above and below. East of the stair is a large stack, now shortened to below ridge level and with no pots. East of this, uncluttered by the stair, the roof line pitches out a little further. Either side of a second shortened stack are a window and a modern doorway, the latter opening out onto the sun terrace. The window is also a late

insertion with two six-pane metal side-opening casements below and two centrally pivoting four-pane casements above. The brick bond, where visible, on the northern face appears less regular than on the south. Headers appear between stretchers at irregular intervals, without the pattern ever quite settling down into a recognisable traditional bond. The brick type is the same $8\frac{3}{4} \times 4 \times 2\frac{3}{4}$ inch hand-made as the south elevation.

The roof is pitched and covered in slate with gables at each end, although the eastern gable has been compromised by the insertion of stair block **90**. The western gable has the remains of a stack which 1960s photographs show was already reduced below gable height at that time. There is a small inserted metal-framed casement window to the north of the stack. The weather-boarded staircase also has a slate pitched roof, but with the slope to the west much longer than that to the east.

Interior

Basement (Figure 50)

42 only has a basement. It was not possible to determine absolutely whether this is an original feature of the Georgian building or a later insertion. However, as the external grilles below the ground floor windows do not appear to be later insertions, it is probable that the basement is an integral build. The basement consists of two main rooms occupied for many decades by the Robert Sayle kitchens (Figure 50.1). Given the description on the early plan, it is possible that this has always been their purpose. Windows in the upper wall on the south side bring in daylight from the ground-level grilles above. The entire area is covered in white glazed ceramic tiles, obscuring any internal structural features.

Ground Floor (Figure 50)

The ground floor of **42** was the main canteen of the Robert Sayle store (Figure 50.2-5). Most of the internal features have been removed by its conversion to a modern canteen but the five large-paned double-hung sash windows in the south wall remain, as do a chair rail and moulded skirting on the north wall of the western part only. The architraves are splayed on the room side (1.50m wide at the window, 1.80m wide in the room) and have a 3½ "Grecian ogee. Below the windows are boxes or window seats, which cover the light wells by which daylight is brought from the external grilles to the basement below. The room was originally divided into two, the stubs of the division wall remaining between the third and fourth windows from the west end on both the south and north walls. Set against the north wall is a large "dumb waiter" which brought food up from the basement kitchen. Immediately east of this a stack juts out. Ceiling height 3.0m.

Internally, **65** is somewhat altered from its original form. At ground floor, the central space is a cloakroom with a door inserted through the north wall leading to lavatories (Figure 50.6); however the west wall of this space is a later insertion, as is the western wall adjacent to **64**, the extended store area, where the bowed front shown on the 1792 and 1862 plans has long since been removed. Although the external door in the south wall is a later insertion, it seems that the wooden staircase to the first floor probably is in its original position. There is no internal evidence to indicate earlier decorative schemes. The location of the original entrance at ground floor level is not clear. The present door in from the alleyway is certainly a later insertion, with a concrete lintel. It is possible that there were originally no openings on this face.

First Floor (Figure 51)

The first floor of **42** was previously also a dining room, but in more recent years has been a rest room in the eastern half and a ladies' cloakroom in the western half, this division created by a later stud wall. The original division of the space, matching that on the floor below, is marked by a deep but narrow beam. This divided the room into roughly one-third to the east and two-thirds to the west. The smaller eastern room had a hearth, now obscured, in the

stack on the north wall. The two doors, one to the north into **63** and one to the east into **90**, are later insertions. The larger room had a hearth, now obscured, in the easternmost of the south wall stacks. There is little evidence of earlier decorative features other than in the windows and architraves, which are Grecian ogee (Figure 51.2 & 3). The dumb waiter against the north wall continues to this floor, reflecting its long use as a dining room. On the eastern side additional framing and boarding has been added to hide electrical ducting, but this has served to conceal a small area of an earlier wallpaper scheme (Figure 51.4). Dating is difficult, but it is probably late 19th or early 20th century. Through the door into the cloakroom area, again little is preserved of earlier arrangements or decoration. The three windows in the south wall are double-hung sashes with Grecian ogee architraves. In the west wall a four-panel door leads through onto the stairs of **65**; in the north wall a door leads onto the weather-boarded external staircase, which runs from this floor to the top of **42**. The staircase itself is described below. In the northwest corner two steps lead down to lavatories. Ceiling height 3.20m.

The first floor of **65** is probably closer to the original layout than the ground floor. The wooden stair runs up from the ground floor round the south and east walls, with a door into the central room from a landing and continuing up to the door through to **42**. Analysis of the access arrangements of the two buildings suggests that this is the original (and then only) access route to the first floor of **42** (see below). The door from the stair into the central room has four panels, partly replaced by glass on the upper handle side and with a moulded architrave. A plain door into a cupboard above the stair space has the same architrave, but a modern door. The door to the lavatories, however, is modern and has a different architrave (Figure 51.5 & 6). There is no internal evidence to indicate earlier decorative schemes.

Second Floor (Figure 52.1-3)

The second and third floors formed part of the hostel accommodation of Robert Sayle for roughly the hundred years between the 1860s and the 1960s. It is not possible now to determine how this arrangement related to the original layout of a building that is some 80 years older, but there is evidence of earlier configurations.

The second floor rooms are arranged on the south side of the building off a corridor, which runs the length of the north side (Figure 51.3). The scars of removed stud walls on the floorboards, however, indicate that the arrangement has been altered, with three small rooms at the east end opened out into one large one. Right at the east, indeed, the scars indicate that the walls extended across the width of the floor, showing that at least the east end of the corridor is a later insertion. This may have been to accommodate the access from 90 which otherwise would have opened directly into a room. The earlier arrangement seems to have been of six rooms, five of which had hearths. The three eastern rooms had their hearths in the stacks on the north wall, the two western rooms had the hearths in the stacks on the south wall. There is a smaller room at the west end, which does not appear to have a hearth, and may not have been a bedroom. Prior to the construction of 90, access to this floor would only have been possible from the external staircase 61. Off the corridor are two doors; one to the flight down to the first floor, one to the flight up to the third floor. Beyond the staircase location, two later doors have been inserted, both late 20th century, the one in the west wall leading to the third floor office added to the top of 65. The earlier arrangement would have put one 12-pane double-hung sash window in each room. These have a simple moulded architrave. There is also a picture rail, certainly a later addition as it runs over the stubs of removed walls.

Third Floor (Figure 52.4 & 5)

Again, this is a former hostel floor, set within the roof space. The present arrangement is similar to that of the floor below, with a corridor on the north side and rooms on the south. There is also evidence of an altered layout. Similarly to the floor below, the corridor seems, at least in part, a product of the added access in from **90**. Floor scars show that the wall of the western room originally extended to the north wall and that at some stage the line of the

corridor wall, now angled round to the access door, continued to the east wall. The division was into five or six rooms, each with a dormer window. It is less clear on this floor where the hearths were located, though this may have been a similar arrangement to the second floor, with the three eastern rooms having theirs in the stacks on the north wall and the other rooms having theirs in the stacks on the south wall. The doors have moulded architraves (11/4 Grecian ogee) and were a mixture of 4-panel ovolo moulded and plain eight-panel. The skirtings are plain and there is no other indication of internal decoration. Ceiling height to centre 2.56m.

External Staircase (61)

(Figure 52.6 & 7)

This is the original stair access for **42** and runs from the first to the third floors. The stair itself is wooden, of simple construction, with rounded nosing on the treads and a 5½" riser. A single flight rises from the first floor, accessed from a door about three-quarters of the way along the north wall. On the second floor there are two doors, one with the flight from the first floor coming up and the other, just to the west, opening onto the flight rising to the third floor. On the third floor there was just a single opening.

Discussion

Structure **42** is the oldest surviving structure at the north end of the site, some 100 years or more older than most of the buildings around it. The arrangement of the building, though altered, is still clear. Structures **42** and **65** are integral to each other with access to the staircase leading to the upper floors of **42** (**61**) only possible from the 1st floor of **42**, therefore via the staircase in **65**. It seems likely, therefore, that the function of the basement and ground floors of **42** were different to the upper floors and that there was no direct access route between the two. Access to and egress from these upper floors was only through the building, labelled "office" on the early plans (i.e. **65**). It is likely that this marks a distinction between working and domestic space, most probably with the former on the upper three floors and the latter on the lower two. No evidence has been found so far to suggest what work was carried out on the upper floors of **42**, but it may have been an early manufactory.

The conversion to hostel accommodation appears to have been largely superficial, achieved for the most part with stud partition walls. Post hostel use many of these had been removed leaving 'ghost' footprints on the wooden floors. The final layout with large open spaces is probably closer to the original form than during its 100 years or so of use as the men's hostel by Robert Sayle.

Structure 56

(Figures 53-55)

56 is located towards the rear of the **No. 13/15** plot as it is now arranged. Prior to the 1970s realignment of St. Tibb's Row the structure was twice as long as now on its east-west axis. Little of the structure now survives apart from the roof and the north wall.

External (Figures 54 & 55)

The north wall stands to two floors, although only the upper part was visible externally. Construction is of grey/white brick laid in English bond. The first floor has five windows, three closely spaced at the west end and two more widely spaced at the east end. The western three are metal-framed two-light casements with six small panes in each side; the next is a metal frame casement with 12 small panes either side. The easternmost is also metal casement, but has three lights with louvers set in to them.

The roof is of slate, hipped at the east end and with the west end cut off.

Interior

(Figure 55.3 & 4)

Few internal features remain. On the ground floor the north wall survives, paint obscuring most detail, but there is evidence for a central fireplace. The south wall has been replaced by three round columns. Ceiling height 2.55m. On the first floor, the north wall survives with its five windows, the south wall replaced by three round metal columns as below. As well as the difference in spacing of the windows there is a change in paint treatment between the close-set group of three and the next. This tends to suggest that there was an original division of the structure into at least two rooms. Immediately adjacent to the paint change is evidence of an opening in the floor, perhaps indicating the location of an earlier stair. Ceiling height 3.24m.

Once the later ceiling cover had been stripped away, it was possible to observe part of the original ceiling, which rose up at the east end into the hip of the roof. (Figure 55.4)

Discussion

Although unprepossessing in its final form, **56** is a very significant structure. This was an early home of the Cambridge Scientific Instrument Company, who sublet a couple of rooms at the rear of Roberts Sayle from March 1882. The premises were extended for CSI by Robert Sayle in 1882 and 1883 (Figure 55.5) with the much expanded company eventually moving out to their new Carlyle Road site in 1895. Important employees of the company included William T. Pye, who had joined as foreman in 1880 and left in 1898 to form the W. G. Pye Instrument Company with his son, William George, and Robert Whipple whose bequest funded the Whipple Museum of the History of Science.

Former Alleyway between No. 15 and No. 16 St. Andrew's Street (53, 54, 67, 89, 100, 101, 102)

The alleyway between **No. 15** and **No. 16** was only finally closed as an access in 1953 when **Nos. 16** and **15** were joined, although for many years use of it had been restricted by heavy iron gates at the St. Andrew's Street end, no trace of which have survived. By the late 20th century, basement areas had been extended under the alley creating a continuous corridor from St. Andrew's Street to the west end of **42**. This opened out into **No. 15** in the north and **No. 16** in the south, where access points had been punched through. On the early plans the alley provided access into, variously, Mr

Butcher's Yard in 1792, a stable yard in 1862 and the rear yard of Robert Sayle in 1938.

Later additions within the alleyway include:

- 53 A two-storey structure built from reused Cambridge brick with a flat roof.
- 54 A galvanised iron Staircase to the first floor enclosed in corrugated PVCu sheeting.
- 67 Machining areas roofed on ground and first floor.
- 89 1950s bridge between 47 and 64.
- 100 Brick chamber in basement.
- 101 Extended basement "corridor" with exposed brick on south side (see below No. 16/17).
- 102 Extended basement corridor outside 42 kitchen.

No. 16/17 St Andrew's Street

(44, 46, 47 (part), 50 (part), 68, 69, 91, 93 (part), 108) (Figures 57-67)

No. 16 St. Andrew's Street was added to the expanding Robert Sayle store in 1874 and **No. 17** by 1877. The two separate buildings were rebuilt as one sometime between 1877 and about 1889, the precise date is not known. Further rebuild and expansion took place in the 1890s, 1930s and 1970s.

Again, **No. 16/17** proper is only the single bay fronting on to St. Andrew's Street. The remainder of the structures to the rear were added at various times in the 19th and 20th century.

Exterior

Street Frontage (Figures 58 & 60)

On the ground floor, at street level, most traces of the original configuration of the 1877-1889 building have been entirely removed by the modern shop front and canopy. Earlier plans and photographs indicate that it was arcaded about 1934/5 in common with the rest of the main store. Above the ground floor the building is faced in stone, which in places is highly decorated.

At first floor level are four large casement windows with two small panes above and two much larger panes below. The two outer windows are slightly narrower than the central two. At each side of the building, and between the windows, are broad stone mullions or pilasters decorated with an ornate classical-derived scheme (Figure 60.6). From the south the first and fifth mullions have a Grecian type vase at the base with ascending acanthus leaves and flowers rising from it. About two-thirds of the way up is a second vessel at the top of a twisted shaft. From this rise a bunch of three flowers. The second and fourth mullions have a different but broadly similar design, with a vase at the base, ascending acanthus foliage to a calix (or chalice) halfway up, with further ascending foliage which has two-petalled flower heads, one either side of the stem. At the top is a plant, possibly a thistle. The central mullion has a third variation; a foliate motif ascends from a plain base with no vase to a single flower head at the top. About halfway up is an escutcheon or shield with the letters RS entwined within it (Figure 60.3). Above each mullion is an ornate console, extending almost halfway down with a heavy boss at the top and a sunflower-like decoration at the bottom. The windows are set within a simple moulded square architrave with a geometric rail running between the consoles. The consoles support a cornice running the full width of the building. Along the corona is a series of 17 small six-petalled flower heads or rosettes, with one above each console and the rest distributed evenly in between. The top of the cornice has a simple concave profile.

Above the cornice, on the second floor are four full-length casement windows, each with two long panes. As on the floor below, the two outer windows are slightly narrower than the two middle ones. The mullions or pilasters between these windows are plain with a large six-petalled flower head or rosette set in a recessed circle above each one (Figure 60.5). Each of the rosettes is different to the others. There is a simply decorated wrought iron railing/balustrade in front of each window. Above the windows a simple moulded cornice extends the full width of the building, but is not supported on consoles.

Above the cornice, on the third floor, are four dormer windows with segmental roofs (Figure 60.2). The windows are two-pane casements with a round head set in a stone architrave with a close-set ribbon moulding around the sides and top. Extending outwards is a deep sill supported on two simply moulded corbels. Above the sill rises the stone outer structure of the dormer, with a moulded front edge on each side and plain above. The inner face of the surround also has moulded decoration, with an incised circle and recessed small panel on either side.

Rear Aspect (Figure 58 & 61)

The rear of **No. 16/17** is only visible from the second floor and then only in part as it is largely obscured by later additions including **108** (a modern flat roofed second floor extension) and the roof of stairway **69** (see below). It is constructed from yellow/white hand-made brick $(2\frac{3}{4} \times 8^{7})_{8} \times 4$ inches) laid in English bond. Only one window is visible at second floor level, a small metal-framed casement with four panes in each light. Above this, on the third floor, is a similar window set in just below the roofline. Both of these have concrete lintels and sills and are probably later insertions. Almost central to the building is a dormer window with a pitched roof and wood-covered dormer head set back into the slope at the bottom of the roof. The sides are slate hung. Within this is a metal-framed casement with three panes in each light. At the southern end of the wall is a similar dormer, the opening of which has been extended to insert a later fire escape door. Towards the ridge of the roof is a third identical dormer.

Roofscape (Figure 61.1 & 61.4)

The roof is slated back and front and has clearly been re-covered fairly recently. Set on the roof are three stacks of varying size and design. At the rear on the south end is a simple brick stack with one surviving round pot and four reduced ones. On the south apex is a large double stack, probably shared with **No. 18**, with bands of four courses of brick set in between three broad bands of a white stone. These are large stacks, each part originally carrying twelve square pots, of which thirteen survive between them. On the junction of the roof with **No. 15**, and probably shared with it, is a similar banded stack, this one with five bands of stone separated by four bands of brick consisting of five courses in stretcher bond. At the top are six square pots.

Interior

Basement (Figure 62)

Having never been adapted for use as shop floor the basements of **No. 16/17** remain something of a "rabbit warren", particularly when crammed full of shelving as when first observed (Figure 62.1-4). Most of the area below **No. 16** was used as a storage area. Construction is of brick; unfortunately most details were obscured by thick paint. The expansion under the alleyway partially exposed the back of the wall to the **No. 16** basement, showing that it was constructed from a mix of red and yellow bricks (Figure 62.6) laid more or less in English bond. About halfway back, in line with the rear wall of the building above, were two large brick piers, one in **No. 16** and one in **No. 17**, presumably providing principal support for that rear wall. This is similar to the arrangement observed in **No. 12** and **No. 13-15** (Figure 62.5). The front of the two larger rooms below **No. 17** was a plant room and consequently access was restricted throughout the recording period. Towards the rear of the basement, on

the north wall, was a scar indicating the position of an earlier stairway; indeed this is still shown as present on service plans from the 1980s. This was the lower flight of stairway **69**, which is discussed in greater detail below.

Ground Floor (Figure 63)

In common with **No. 12** and **No. 13-15**, the front part of **No. 16/17** at ground floor level has been significantly altered, first around 1934/5 when the arcaded front was constructed and again in the 1970s when it was removed and replaced with the flat front and display windows of the modern shop. Little evidence of the earlier arrangements survived. Ceiling height 3.71m.

Behind the No. 16/17 front the building was extended over several phases each either expanding on or removing what had gone before. 68, immediately behind the rear wall line of No. 16/17, is part of the expansion of between about 1889 and 1898 which removed the rearmost part of the No. 16/17 rebuild of 10 years earlier. Within 68, and seemingly contemporary with it, is a flight of stairs (69) rising to the first floor (Figure 63.1 & .2). The stair is of wooden construction, with turned balusters, a moulded rail and plain string. It is clear from examination of the floor beneath this flight, and from the presence of a scar on the wall of the basement below that a further flight used to run down to the basement, which has subsequently been removed. Behind 68 is 46 the construction of which also belongs to the 1889-1898 extension phase. Part of the wall of 46 is also visible externally in the alleyway to the north, here it is constructed of brick laid in English bond and painted. The three bays of 46 have tripartite windows set at the top of the wall with substantial stone mullions between each light. The large north south roof beams of 46 are supported in the north wall on double brackets formed in a volute with foliate decoration on the faces (Figure 63.3). The beams (actually constructed in steel) are cased in moulded plaster with a recessed panel on the lower face. When first built the 1889 plan shows that 46 had a west and south wall. The position of the former is now marked by a beam supported on hollow square columns, the line of which continues through into 47. Investigation showed that the lower part of the north wall of 46 had been covered in tongue-and-groove.

Construction of 47, immediately west of 46, belongs to the 1934/35 Selfridges expansion phase, during which the west and part of the south wall of 46 were removed. It extends southwards behind No. 18/19 and No. 20. Within 47 the support columns are solid and square with extra ones in between supporting north-south beams in the ceiling. A moulded cornice runs around each bay. Shallow windows are set at the top of the wall, which below the windows is mostly constructed from glass blocks (Figure 63.4). Within this space was the earlier location of the Robert Sayle brewery but there are no traces of this surviving. The large staircase at the west end, joining this floor to the floor above in both No. 16 and No. 15, was added in 1955; the additional extension to the west (93) was added in the early 1970s.

Beyond **93** is the delivery yard (**50**), the eastern part of which is covered with a polypropylene roof. Within the yard stands the 1970s security hut (**44**); built of lightweight frame and panel with a flat roof, this was originally freestanding and is earlier than the adjacent structure and attached roof (Figure 63.5). The yard was originally much larger, losing area and several buildings when St. Tibb's Row was realigned for the Lion Yard redevelopment around 1971. Within the yard are a series of modern staircases and fire escapes sheathed in corrugated plastic (Figure 102.1 & .2).

First Floor (Figure 64)

In **No. 16/17** the east wall has four almost full-length casement windows with a panelled dado or wainscot below. The two central windows are slightly wider than the two outer ones (Figure 64.1). The south wall was initially obscured behind partitions, but when visible had a small brick-built fireplace. This had clearly at some point had a surround, which had subsequently been removed. The wall around the fireplace was plain but there was evidence of at least two wallpaper schemes. The earlier was pale yellow with a white floral pattern, the later was

images of Paris - street cafes, the Eiffel tower, elegant women, men on bicycles all in red, white and blue on a pale blue ground (Figure 64.4). The west side was open through into **68**. The north wall has a plain undecorated arch through into **No. 13-15**. When the obscuring panelling had been removed, a large heavy fire door was revealed, presumably designed to cut off the link between the two buildings in the event of fire (Figure 64.2). A moulded cornice ran at the top of the wall and there was a large central medallion in the ceiling with six (three to the east, three to the west) small ceiling roses with hooks (Figure 64.5 &64.6). Ceiling height 3.64m.

At first floor level **68** is entirely plain and dominated by the staircase **69**. The pattern of the stair is the same as on the ground floor with a balustrade running from the top of the flight from the ground to the base of the flight to the second (Figure 64.7).

In **46** the walls are lined; at the east end the ceiling is skimmed plasterboard. At the west end there are fibreboard panels with a large squarish skylight. Beyond this in **47** is a circular skylight (one of three across the space) and a further smaller square one beyond that just in front of the stair access (Figure 64.9). The stairs are of the 1955 build, constructed with open treads and simply decorated metal balusters with a wooden hand rail (Figure 64.8). Long east-west skylight extends over the staircase. On this floor **46** has three square columns, covered in plasterboard. They are set 2m out from the south wall line in line with the circular columns in **47**. Positions match those on the ground floor. The **93** extension has no distinguishing features.

Second Floor (Figure 65)

Access to the second floor of **No. 16/17** is only via the wooden staircase (**69**) from the first floor (Figure 65.1) or via the corridor from **No. 13-15**. The stair is housed beneath a large sloping roof, the relationship of which to the main part of **No. 16/17** confirms that the whole **68** structure is later than this build. At the top of the stairs is the gift wrapping room (Figure 65.2), from which access is gained to the remainder of the floor, most of which is occupied by office and storage space. The largest of the offices fronts onto St. Andrew's Street, with all four of the large windows in its east wall (Figures 65.4 & 64.5). A picture rail runs round the front part of the room, but is interrupted by the insertion of later stud walls. This was probably originally all one room; it has chamfered beams and a plain skirting. The windows to the rear of this floor were lost around 1973 when **108** was added. Access to **108** is from the external metal staircase (**74**) between **No. 17** and **No. 18**. Originally intended as office space, the room was most recently used for storage (Figure 65.6).

Third Floor (Figure 66)

In the present arrangement of the third floor, probably dating to the Selfridges refurbishment of 1934/5, access to the third floor of **No. 16/17** is only possible from the corridor that runs through from **No. 13-15**. Once subdivided, the room at the front now extends across the full width of the building, with four dormer windows looking out onto St. Andrew's Street (Figure 66.1, 66.2). The skirting is plain and the doors plain four panel with a Grecian architrave. West of the corridor are three small rooms. A tiny room at the north end has a metal-framed casement window in the west wall (Figure 66.6); the central room has a dormer window (Figure 66.5), whereas in the southern room the previous window has been removed to insert a door to the fire escape. The dormer structure remains.

Fourth Floor (Figure 67)

Set within the roof space is an attic. The northern half is walled off with a small access hatch leading to water tanks *etc*. The southern half is an attic room with a dormer window in the western side (Figure 67.1-3). It has exposed roof truss and collars with a principal rafter. The door is constructed from slats held with three cross pieces. Rising to the attic from the third floor is a rickety wooden staircase with stop-chamfered newels with a ball top (Figure 67.4).

Immediately at the top of the stairs, though only reached by an awkward sideways step, is a much smaller room. The door to this is panelled in the lower part, with four panes of glass set in the upper part (Figure 67.5). The room is tiny but shows remains of an early wallpaper scheme on the main beam (Figure 67.6). This is a swirling foliage and flower pattern in white on a light brown ground. Beneath it was evidence of paper with a different scheme. Whether the intention was decorative or protective is unknown.

Discussion

16 and 17 St. Andrew's Street were the latest additions to the main Robert Sayle store (in 1874 and 1877 respectively) and were completely rebuilt into purpose made retail space in two phases between about 1877 and 1898 (with further alteration and extension in the mid and later 20th century). It seems probable that it is during the latter of these, sometime between 1889 and 1898, that the internal decorative scheme within **Nos. 13-17** was established. including the installation of the two main staircases behind No. 13-15 and 16. Apart from the staircases themselves the scheme is best preserved at first floor level in Nos. 13-17, and this is where it achieves full expression. At ground floor level the moulded architraves and keystones are present. Old photographs show that there were some more elaborate decorations. specifically plaster festoons of flowers and fruit below the large skylight in 63, whether these survived the 1934/5 alterations is not known, but they were no longer present in 2004. Once this scheme was established it remained and was extended as further expansion and alterations were carried out, specifically the continuation through into the front of No. 12 following the 1905/6 rebuild. As noted above, however, although in the same style, the realization was rather simpler than elsewhere. Although the opening out through into No. 12 was not fully achieved until the 1934/5 redevelopment, photographs predating this change show that the scheme was already in place in **No. 12**. The ubiquity of the decorative scheme across the entire front of the store, including the long-time separate No. 12, indicates a coherence of corporate vision, one store - Robert Sayle - rather than a series of shops joined together. How much this vision owes to Robert Sayle the man is not known. It is stated in the History (2004: 25) that he had vowed never to alter No. 12, the premises where he first opened a shop, so it is likely that the unified appearance of the enlarged store belongs to his immediate successors.

The expansion of the buildings behind **No. 16/17** again took place over several phases. The 1934/35 phase (under Selfridges Provincial Stores) removed the building labelled in 1889 and 1898 as "Brew House", previously a stables. The pump house above the well in the yard, which had fed the brewery as well as the shop until connected to mains water, was removed in 1964 and its location largely covered by the 1970s extension **93**. Traces of the brew house and a major portion of the well were observed archaeologically, but nothing of either survived above ground (Cessford 2007: figure 41).

Robert Sayles Main Store: Discussion

(Figures 68-73)

As described both above and below, by 1877, and probably a little earlier, the Robert Sayle store occupied most of the **No. 12** plot (apart from the rearmost area), all of **Nos. 13-17** and the areas to their rear, and the rear of plot **Nos. 18** and **19**. This is the area shown on the plans on Figure 68 and developed in Figures 69 and 70. These plans, part of the leasehold record for the properties held by Jesus College, show the development from individual house/shops to a purpose built retail establishment, with its ancillary and support structures, over a period of about forty years. Sadly, although **No. 12** is just as much part of this story, it belonged to Emmanuel College, and so does not appear on the plans until the one drawn up by SPS in 1938 (Figure 70). As time passes the space closer to St. Tibb's Row is gradually infilled, most noticeably between 1862 and 1889. Sitting amongst these newer buildings, however, is Structure **42**, built in the late 18th century. It appears that this and the attached Structure **65** are the only buildings on the 1862 plan still standing intact by 2004.

According to Lintonbon (2006) two main models of retailing emerged towards the end of the 19th century. One endeavoured to create an architecture integral to the development of sales, the other was more concerned with the concentration of retail identity within a branded business where the architecture of the shop building mattered less than its signage and fittings. The late 19th/early 20th century redevelopment of Robert Sayle would seem to express the former rather than the latter.

When Robert Sayle opened his first shop in 1840 the retail world was at a point of change. Rather than selling only the component materials for clothing, new manufacturing techniques and an awareness of fashion was paving the way to a ready made clothing market. This coupled with the arrival of the railway and the telegraph allowed goods to be ordered, dispatched and handled with much greater efficiency than before. Lintonbon identifies another trend, particularly observed in the drapery trades, which was to 'departmentalise' businesses. This allowed such businesses to benefit from economies in increased buying power and had the attraction for customers of finding many related goods conveniently within one shop - the Bon Marché shop in Paris, according to the Encyclopaedia Britannica, is considered to be the worlds first department store having achieved this by about 1865. Departmentalisation, however, had obvious spatial implications because of the need for additional display space and the requirements of handling and storing large quantities of goods. By adopting these newer sales methods, Robert Sayle, in effect, created the situation whereby the business had to change physically to cope with the increasing demands on an infrastructure that had ceased to be fit for purpose. This provides the context for the initial phase of redevelopment starting in 1876 (coincidently the year Bon Marché moved into it's own purpose built establishment, designed by engineer Alexandre-Gustave Eiffel and architect Louis-Auguste Boileau). demands of modern selling methods led to the use of the most modern construction methods to create the spaces in which to carry these out. In

Cambridge this change was further boosted in 1882 when University Dons were allowed to marry for the first time, creating a whole new potential customer base right on Robert Sayle's doorstep. This roughly coincides with the second phase of the redevelopment, involving chiefly **Nos. 16** and **17**. This seems most likely to be the point at which the decorative scheme across the main shop floor areas was established, the main sweeping staircase installed and the intricate moulded plaster and wood embellishments added. A further six or so years later **No. 12** itself was rebuilt – in an entirely different style externally, although inside the decorative scheme was extended, at least in part. In this instance, in the absence of evidence to the contrary, it seems likely that the wishes of the landlord (Emmanuel College) overrode any unifying desires of the lessee. Even the form of the space created was something of a compromise as no break through between **Nos. 12** and **13** took place until Selfridges' ownership of the 1930s.

Even within the purpose built shell the Robert Sayle became space appears to have been at a premium throughout its history. Storage space became shop floor, workshops became stores, bedrooms became stores and offices and the space occupied by buildings was increased, though only significantly in the later years of the 20th century. While the outer shell remained more-orless intact the interior was altered to suit changing needs and fashions. This is seen in part in the contrast between the interior photographs of 1933 and 1935 (Figure 72) where the dark long wooden counters of the Victorian shop are replaced by the lighter, more open units of the 20th century. The shop is also more open with the break through having been made between Nos. 12 and 13. Selfridges, as "Selfridges' Provincial Stores", only owned Robert Sayle from 1934 to 1940, but the changes made at that time strongly influenced the shape of the next sixty-five years. The light and the more open aspect, however, did little to alleviate the need for more selling and storage space. Every available nook and cranny was in use, and most design decisions had the need for more space behind them. The arcaded front was created for more window space, but was removed in 1970 to expand the shop floor, i.e. the selling area. The area to the rear became more crowded, this hugely exacerbated by the loss of about a fifth of the site under compulsory purchase when St. Tibb's Row was realigned as part of the Lion Yard development in 1971. Whilst this did allow for some expansion back towards St. Tibb's Row (Figure 73) the talk in the early 1970s focussed more on moving Robert Sayles to a new location as opposed to expanding on its own site (Sieveking and Gooch 2004: 135).

Although it was a true purpose built retail establishment, the Robert Sayle store in Cambridge, however forward looking, was actually not conceived of on a sufficiently large scale to outlast changing times and the limitations of its physical containment. The space given to the original department store, Bon Marché, with its skylighted interior courts, or to other broadly contemporary English constructions such as the Walsh's new store built in Sheffield in 1896 (five storeys high plus attic with 3½ acres of floor space and frontages onto each thoroughfare of 200ft and 172ft), Lewis's in Liverpool and Manchester and Selfridges in Oxford Street, all dwarf Robert Sayle in scale and conception. Robert Sayle, both the man and the company, however, were

pioneers in their own area. The store begun in 1840 and remodelled on modern lines in the 1870s and 1880s outlived all its rivals such as Laurie and McConnal in Fitzroy Street (1883 - 1977), Eaden Lilley on Market Street (1833 - 1999), Joshua Taylor in Sidney Street (1860-1991) and Mitcham's on Chesterton Road (1909-1977).

No. 18/19 St Andrew's Street

47 (part), 50 (part), 51, 73, 74, 75, 76, 93 (part), 109 (Figures 74-83)

Although much of the rear of these properties had been part of Robert Sayle for many years (since at least 1862) **No. 18/19** itself was not actually added to the main shop until 1988. Subsequently, the building had not been substantially altered from its Victorian form. Based on lease plan evidence the change from two identifiably separate structures (**18** and **19**) to one combined behind a single façade took place between 1862 and 1877. The building was, for many years, a chemist shop on the ground floor.

Exterior

Street Frontage (Figures 75 & 77)

The front of the building is faced in brick. On the ground floor most of the original shop front has been lost, replaced by a flat modern display window and fascia. On the southern side of the ground floor is a somewhat grand doorway. It is constructed in brick, markedly different in colour to that on the upper floors and appears much more recent. The door is six-panelled: with two small panels at the base, two large in the centre and two small at the top. Above the door is a rectangular fanlight with an ornate wrought iron grille in front of it. Above this again, a large stone plaque is set into the brick. The design shows a pestle and mortar with an owl sitting on one edge holding a scroll in one claw (Figure 77.6). Either side are the dates 1851 and 1934, the scroll beneath has a Latin motto which is all but illegible. It appears to read "SCIENDO ET C??ANDO". It is not clear what this is supposed to mean and may be cod Latin composed in the 1930s.

Above ground floor level, the building is faced with brick in three colours: the main ground colour is a bright yellow/white brick set in English bond; on the quoins, below the roof and around the first floor windows, is a bright red brick and around the edges of the windows at first and second floor is a duller yellow/white colour. At first floor level are three double-hung sash windows with rounded heads. The brick surround is in two parts: an inner of red brick using voussoirs with a moulding above the frame of the lights; around this is an outer pattern in darker yellow/white brick with long voussoirs forming an arch at the top and a "long and short" pattern down each side. The three windows are formed on the same pattern but the central one is wider, with a broader surround of the red brick. At the top of each window arch is set a decorated keystone in stone (Figure 77.4). The design on each of these is different; at the south end is a foliage decoration with a stylised lotus flower at the top; at the north end is a bunch of grapes flanked by vine tendrils; in the centre, however, is a Caduceus, two snakes entwined around the winged staff of Hermes, generally taken to be a symbol of the medical profession (Figure 77.7). Interestingly the true symbol of medical practice is generally accepted to be the single snake entwined around the unwinged staff of Aesculapius, both only coming into common usage in the 20th century. The double snake version gained popularity after it was adopted by the US Army Medical Corps in 1902 (Wilcox and Witham 2003). In this instance, use of the Caduceus presumably relates to the building's history as a dispensing chemist and again probably belongs to the 1934 scheme.

On the second floor are again three double-hung sash windows. These, however, have only a simpler version of the darker yellow/white brick surround without the red brick infill. These windows have slightly jutting out stone sills, each supported on two simple moulded brackets. Between each sill is a narrow band of stone, decorated with a simple recessed panel. Above these windows, and immediately below the roof line, is a broad band of decoration incorporating each of the three brick types used below. Ten consoles, formed in bands of the two yellow/white bricks, divide the upper part of the elevation into nine sections. Within each of these, and forming a continuous band, is a block of the red bricks, forming a blind niche in which is set a stone block with a stylized foliate design. Above this is a cornice, again formed from the yellow/white bricks.

Set into the roof are two dormer windows with pitched roofs and wooden surrounds. These are fully within the roof; each has casement windows with two panes on each side.

Rear Aspect (Figures 75 & 78)

The rear of **No. 18/19** is partially obscured by the addition of a plastic-covered fire-escape/access stair (**74**) linking the building with **No. 16/17**. An elevation drawing from the archives, dated July 1988, shows that this covered at least two older windows, both of which were reformed as doorways. The walls are constructed from yellow/white brick with no repeat of the elaborate patterning seen at the front. The bricks are laid in a Flying Flemish or Monk bond (*i.e.* stretcher, stretcher header, stretcher, stretcher header), again different from the front elevation. At the rear, **Nos. 18** and **19** are distinguishable from each other mainly in that there is a rear extension to **No. 19**. Behind this, however, the rear wall of **No. 19** is set slightly further back than that of **No. 18**, also giving a slight height difference in the lower edge of the roof.

At ground level, but not fully visible in the photographs, was a large casement window with three divisions (Figure 78.4). This was blocked both internally and externally and viewed only with difficulty, although in the past it must have been a main source of daylight to the ground floor. At first floor level, the only window remaining was a very small casement tucked right in beside the rear extension. The modern brickwork around the altered window was clearly visible. From the first floor downwards the rear wall is set further out than that above. At second floor level again the windows have gone except for a three-pane casement set immediately below the roof of **No. 19**. Set in the roof above **No. 18** is a single dormer with a pitched roof and wooden surround. Above **No. 19** is a modern skylight, flat with the roof pitch.

To the rear of **No. 19** is an extension wing with a sloping roof (Figure 78.5). In the northern wall of this is a door and window at ground floor level, the door giving access to the rear yard, which in recent times was no longer accessible. At first floor level a double-hung sash window with six panes in each. Right at the top of the wall, within the apex of the roof, is a small single-pane casement. On the east wall there was a large window at ground floor level; this is now largely obscured by later construction in front and is blocked up.

Roofscape

The roof is slated back and front. The ridge height is much lower than that of the main Robert Sayle store to the north, reflecting its much later acquisition (*i.e.* after the main rebuilding phases). Chimney stacks are set at the rear on the north end and at the front on the south end. The rear stack is plainly built, with only one round pot remaining from an original five. The front stack is more ornate in construction, with four square pots. A third stack rises from the southern side of the rear extension to **No. 19**. This is plain and all pots have been removed and the top sealed (Figure 78.6).

Interior

Basement (Figure 79)

The basements of **No. 18** and **No. 19**, although distinguishable, are joined as one. Of the three main rooms, two were below **No. 18** and one below **No. 19**. Access inside the building is from an internal staircase from the ground floor on the **No. 19** side (Figure 79.4). When examined, the basement was still full of shelving from Robert Sayle and detail was difficult to record. Some traces of its domestic origins, presumably as kitchen and scullery, still remained, with quarry tile flooring surviving in places (Figure 79.3).

Ground Floor (Figure 79 & 80)

Much of the ground floor was opened up to form the Robert Sayle wool shop, occupying most of the footprint of both plots. The entrance through the front door leads into a hallway with tongue-and-groove wainscoting on the northern wall. Above, a cornice runs down both sides and above the door (Figure 79.5). At the east end is a flight of stairs to the first floor and about halfway along the north wall a doorway into the main shop. In its present form this is entirely modern, but it may have replaced an earlier version. In the shop area most original features have gone, save for the large window to the rear which was blocked-up and covered by modern panelling (Figure 79.6). An opening to the rear of the shop area gives access to a single-storey extension, but no further progress westwards can be made at this level.

Behind **No. 18/19**, but not accessible from it, are **76** (described under **No. 20**, see below), **75** and **109**. **109** is a single story store room accessed from **108**. **75** is a corrugated plastic roof covering a yard area to form further storage space. Again this cannot be accessed from **No. 18/19** and is reached via **No. 20** or **73**. **73** has a more substantial slate roof, but is still, in effect, a covered-over yard area, in this case being utilised as the Robert Sayle display studio (Figure 80.1). This area has access back into **75** and into **72** (see below). Access back to the main shop floor is via **72**; **47** and **93** are described above.

In the rear yard (50), 51 is a modern metal staircase covered on corrugated polypropylene, giving access ultimately to the roof area (Figure 80.3).

First Floor (Figure 81)

At first floor level the distinction between **No. 18** and **No. 19** is lost, with the space divided into three rooms and the rear extension. The larger of the two front rooms has two of the street facing windows, the smaller has one (Figure 81.1-3). In modern times the wall between the rooms has been largely removed to form one larger room, but in use the distinction was obscured again, with a panel filling in the opening. A cornice runs round both the smaller and larger spaces, indicating that they were originally two rooms, probably part of a set or suite with a small square hall entrance. Both rooms have stacks, but the fireplaces have been long since removed. The rear room has no cornice and is very plain. The original window was removed in 1988 to insert a doorway onto the exterior metal staircase, providing access to the rest of Robert Sayle. There is a stack in the north wall (Figure 81.7). The rear extension is, again, a plain room with a stack on the south wall (Figure 81.6). In the central area by the staircase one of the walls has a simple analypta wallpaper covering (Figure 81.4).

To the rear of **No. 18/19** is **74**, a late 20th century metal staircase cased in corrugated polypropylene. This provides first and second floor access between this building and **No. 16/17** next door. Access to **47** and **93** is via the main shop (see above for descriptions).

Second Floor (Figure 82)

The second floor in **No. 18/19** is accessed via the main staircase, which is of wooden construction with turned newels; the balusters have been removed.

The rooms on the second floor are all plain and without cornices. At the front are one large and one smaller room. The smaller has a stack on the south wall, the larger a stack on the north wall. Both had cast iron fireplaces that had been blocked up (Figure 82.1-3). The rear room has again lost its window to a doorway leading to the external staircase. There is a stack on the north wall with a cast iron fireplace (Figure 82.4). In the rear extension this upper room is tiny and fitted into the roof space (Figure 82.5). Again, at this floor the staircase shows evidence of its original and altered form (Figure 82.6).

Third Floor (Figure 83)

The third floor is divided into three main rooms: two at the front, one at the rear and a very small room between the front rooms and the staircase. The front and rear rooms are set partly into the roof space, with dormer windows opening to front and rear respectively. Between the larger front and rear rooms is a partition wall. In the rear room this is rather crude with plain horizontal planking, in the front. Given that in the rear room this wall cuts across a blocked opening, possibly a window (Figure 83.5), it suggests that the partition is a later insertion and that the room at one stage, if not originally, extended from the front to the back of the building. This would, however, have given it two fireplaces, so it is equally possible that the partition has simply been moved from its original position. The front room has a dormer window to the east (front) and a fireplace on the north wall. The rear room has a dormer to the rear (west) and again a fireplace on the north wall. The smaller front room has a dormer window to the front (east) and a small fireplace on the south wall. Again, at this floor the staircase shows evidence of its original and altered form.

Discussion

On the lease plan of 1862 **18** and **19** are two separate structures, **18** labelled 'shop and offices', **19** labelled 'shop'. On the plan of 1877 only one structure is shown. Between these two dates, with the possible exception of the basement area, two have become one. It is interesting to note that this 'oneness' is slightly less clear at the rear of the property although the rear wall is of a single build phase. The change in the building can be narrowed down further. In the 1861 census **Nos. 18** and **19** are occupied separately by, respectively, John S. Christmas, Solicitor and Joseph Yorke Oliver, Tobacconist and Tea Dealer. Mathieson's Cambridge Directory of 1866 lists Henry James Church, Chemist, as occupying **No. 18** and in 1867 **No. 18/19**. This suggests that the reconstruction of **No. 18/19** can be narrowed down to the years between 1862 and 1866/7, predating the first phase of reconstruction at Robert Sayle by a decade.

No. 20 St Andrew's Street 47 (part), **48**, 49, **72**, 76 (part), 77 (Figures 84-92)

No. 20 is a bricked fronted building at least partially rebuilt in the late 1860s. Other than for its ornate doorway the front elevation is rather dull.

Exterior

Street Frontage (Figures 85 & 88)

The front of the building is faced in brick. On the ground floor most of the original shop front has been lost, replaced by a 19th or early 20th century display window with modern fascia above. On the southern side of the face is a rather grand Romanesque-style doorway with an ornate semi-circular arched top with three parallel layers, set on a group of round and squared pilasters with highly decorated capitals. Only the outermost arch layer has moulding within it. Within the arch is a plain single-pane fanlight. There is a double door with three panels on each side. In each of the spandrels above the arch is a recessed roundel containing an ornate monogram (Figure 88.4). This appears to be WM, who may be the W. Maitland a photographic artist who is listed here in 1866/7, around the time the house was built (see below).

The pilaster/capital pattern is picked up again at the north end of the face, the space between filled with windows and an in-set door. The windows have a generally geometric pattern, but the spandrels within part of the pattern are decorated with a swirling stylised plant. This may indicate that the windows and door are contemporary. The spandrel decoration, however, is more reminiscent of an Art Nouveau design, which might suggest it is rather later.

Above the fascia the build is of a dull yellow/white brick laid in Flemish bond. At first floor level are three double-hung sash windows with single large panes above and below. The window-heads flare and are 1½ bricks deep in a slightly paler brick. The three second floor windows are also double-hung sash windows with single large panes above and below. These are the same width as on the floor below but are shorter. The window-heads are one brick deep and appear the same colour as the main brickwork face. The second floor windows have a stone sill, the first floor do not. Two courses of brick above the second floor window-heads is a stone string-course, approximately three bricks thick. Above this is a 10-course brick parapet topped with a slight overhanging coping. The parapet is built in Flemish bond and the bricks appear darker in colour than those of the main build. The upper three courses include much cleaner yellow/white bricks suggesting that the parapet has either been heightened or rebuilt.

Rear Aspect (Figure 88)

The rear of the building is partly obscured by later additions and no features were observed at ground floor level. To the north end a three-storey wing projects westwards (77). This has a mansard roof and casement windows at first and second floor levels. There is evidence of a blocked opening, probably a door, just at the point the wall is obscured by the structure in front. At the southern end is a smaller timber clad projection (Figure 88.6). This has a blocked opening, possibly a door, at first floor height and two windows on the second floor.

Roofscape

The roof of the main building is common pitched, covered in ceramic tiles. The rear wing (77) has a mansard roof, again tiled, but with alternating bands of red and yellow tile forming a pattern. On the exposed south side this consists of eight rows of yellow/white tiles, seven rows of red tiles and six rows of yellow/white again. The edges of the mansard are also picked out in red tile with the body in the yellow/white. The roof of the little timber-clad projection is a simple single pitch roof covered in slate.

Interior

Basement (Figure 89)

The current basement is small and located towards the centre of the building. It is accessed by a trapdoor on the ground floor via a steep set of wooden steps. An older, rather more shallow, set of steps remains in place, suggesting the space had been slightly more accessible in the past. On the north wall is quite a large fireplace, now blocked, with a stone surround and mantel. The large fireplace and visible areas of more recent brickwork in the walls indicate that the cellar was originally larger, presumably extending towards the street frontage, and has subsequently been filled in. During excavation works to the rear of the property part of a stairway was revealed against the north wall, presumably for access into the larger cellar (Figure 89.3). Full excavation was not possible, but the find suggests that the cellar at one time occupied most of the original footprint.

Ground Floor (Figure 890

Little remains of the original divisions of the ground floor as it has been opened up into the modern drycleaner's shop extending from the front through to the rear. The 18th century form of the building ended at the rear wall to which a later one-storey extension has been added (76), also extending across the rear of No. 18/19, but without any access from that building. To the south is a ground floor side passage, giving access to a staircase to the first floor. This staircase is a later addition, probably in the 20th century, to enable expansion of the shop space into the rear wing by removal of the original stairs from the middle of the building. These still exist from the first floor upwards (see below), but would have originally descended to the first floor and possibly down to the larger cellar. It is likely that these were accessed from a staircase in the side passage. The new stair to the first floor was provided parallel to the passage and taking in part of the south side of the shop (Figure 89.6).

The passage itself leads to the rear of the building giving access to **75**. Although under the same roof as **76**, it runs around the outside of the wall, acting as a fire escape route from **76** but not into it.

First Floor (Figure 90)

The first floor has two principal rooms, one in the street range at the front and one in the wing to the rear. In the front room is the evidence that the street front was extended forwards by about one metre, probably in the 19th century. Extending slightly from the north and south walls, about one metre back from the present front wall, are the boxed-in remains of the earlier frame of the building. (Figure 90.1-2) All the details surviving in the front belong to the 19th century with early 19th century door architraves, three late 19th century single sheet sash windows and a late 19th century marble fireplace surround (Figure 90.3). There is no cornice. The room is significantly impinged upon by the structure containing the ground to first floor staircase, a later insertion.

The rear room retains some earlier features including an 18th century eared fireplace surround in timber with a *c.* 1900 iron grate, and a small 18th century cornice. The window is a 20th century casement. Two tall doors form cupboards either side of the chimneybreast (Figure 90.4).

Within the timber-clad extension (see above) at first floor level is a very small room, scarcely larger than a cupboard, although it does have a rear-facing double-hung two-over-two sash window, now boarded on the outside. The rear (east) wall of this space is the exposed brick of the front wing; the other three are horizontal tongue and groove (Figure 90.5-6).

Between the two main rooms is the staircase to the second floor. This is a plain 18th century dog-leg closed string stair with square newels, plain balusters and a moulded handrail. There is a half-pace landing between floors (Figure 90.7).

Second Floor (Figures 91 & 92)

The second floor has three principal rooms: two in the street range at the front and one in the mansard wing to the rear. The larger of the front rooms has a plain skirting and no cornice. There are two double-hung one-over-one sash windows, the architraves to both doors and windows being late 19th century. The fireplace on the north wall has an 18th century eared surround with a *c*. 1900 iron grate (Figure 91.4). Between the windows and extending back to the inset doorway, is a narrow wooden structure, perhaps intended as a dividing screen. This only survives on the east wall and across the ceiling. Ceiling height 2.50m.

The southern of the two front rooms is much smaller with a single one-over-one double-hung sash window. Again the door and window architraves are late 19th century. A small fireplace in the angle of the southwest corner has a late 19th century fireplace surround and grate (Figure 91.6). Skirtings are plain, there is no cornice (Figure 91.5).

The rear room is set partly within the mansard roof of the wing giving a curve to the upper quarter of the north and south walls. Skirtings are plain and there are generally few features. The window is a 20th century casement, the door has a 19th century architrave. There is no fireplace (Figure 92.1-2). Ceiling height 2.08m.

Again within the timber addition to the rear is a space more recently used as a toilet and washing room. Two windows face to the rear (west) one a casement with six small panes and the other a smaller two-pane casement. A later non-opening window has been inserted into the south wall. (Figure 92.3).

A landing hallway provides access between the front and rear and to the staircase. This is in two parts: To the east a doorway opens onto an ante-hall from which open the doors to the two front rooms. No door was present when observed but presumably in the past this suite was separated. The larger part of the landing leads to the stair, the rear room and the small timber extension. At the east and west ends of this landing are two rather unusually shaped door openings. The upper part is 'arched' upwards with straight sections of moulding (Figure 92.4-5).

The staircase continues to the second floor as the plain 18th century dog-leg closed string stair with square newels, plain balusters and a moulded handrail seen below (Figure 92.6).

Discussion

The 18th century core of the building has a traditional plan with a range parallel to the street and a short back wing. The street range has a ground-floor side passage at its south end and there is a staircase in the east end of the back wing. That staircase survives above the ground floor, as do two eared fireplace surrounds, in the first floor back and the second floor front, as well as some contemporary door architraves.

The second floor of the rear wing had a mansard roof, which may have been an addition of the early 19th century to convert roof space into a usable room.

In the later 19th century (based on lease plan evidence between 1862 and 1877, but probably around 1867-69) the street front was extended forward by about one metre. In May 1869 the plot is described as a "part new builded

brick built house". The cellar below the front room was filled in and the ground floor, which had been about 500mm above the street, was lowered to only 150mm above. The old front wall of 2" brick was demolished and a new one of grey 3" brick was erected above a new glazed shop front with a central entrance and an elaborate doorway to the side passage. That doorway led both to the properties at the rear, including the former studio of the artist Robert Farren (see below), and to the staircase to the upper floors which were offices. Structurally the extended upper floors were supported on nibs, formed by short lengths of the old front, against the side walls which in turn held up the old floor plates which were strengthened by iron plates or flitches sandwiched between additional timbers carrying short joists to the new front wall. The structure of the old roof was retained but rafters to a lower pitch were added to the front to extend the roof over the extra metre. Internally there was some refitting. A white marble fireplace surround was put into the first floor front room and the small south room on the second-floor front was given a corner fireplace.

The floor of the side passage was always close to street level. It was boarded and had heavy joists bridging a narrow brick-walled cellar. The rear wall above the ground floor was rebuilt in 3" brick, presumably in the 1880s. That was subsequently masked by the addition of service rooms containing sinks and WCs to each floor. The new back wall was timber-framed and weather-boarded. It is possible that until the second half of the 20th century the old staircase existed to the ground floor and cellar and could be approached by a staircase from the side passage. The lower part of the stairs was removed to enable the shop to extend as a single room into the back wing and a new stair to the first floor was provided parallel to the passage and taking part of the south side of the shop. The cellar below the stair was then reduced and could be approached only by a trap door. It may have been then that the cellar below the passage was partly filled with loose rubble.

Structure 72

(Figures 93-98)

Structure **72** lies to the rear of **No. 20** St Andrews Street and is approached by a passage beneath the south side of that building. The building is of two storeys and measures approximately $10.50m \times 5.50m$. When first observed only the south and parts of the east and north walls of the structure were visible as the later shop had been built up around the three of the sides. Subsequent demolition revealed the building in roughly its original form.

Exterior

Elevations (Figures 94, 95, 97)

Most of the gable wall at the west end had been removed when the building was joined to Robert Sayle's in the 1980s and could not be recorded. The surviving apex of the west gable was cement rendered.

The north wall, when exposed, was seen to have windows at ground and first floor level. At ground level were three windows, each one different to the others (Figure 97.2). At the east end is a casement with six small panes in each side; at the west end a double hung sash with six panes above and below; between these two, but closer to the west end was a larger double-hung sash with two panes above and below. The impression is that none of these windows are original to the building and are reused from elsewhere. A door at the west end is a modern insertion.

At first floor level most of the length of the building is taken up with a bank of eight windows all metal-framed casements (Figure 97.3). The easternmost of these is a 'half' window in comparison to the others and it is possible that there were originally nine in the run, the 'half' being completed and one more beside it. However if the external stair is part of the original build (see below for discussion) then there only ever were eight windows. Fixed to the side of the building is a mechanism presumably related to either opening the windows themselves, or perhaps vents/windows on the original roof. The first floor is slightly jettied out from the ground on a series of curved jetty supports. At the east end the first floor structure housing the top of a later external staircase extends northwards obscuring the easternmost of the windows.

The east gable wall was largely obscured below first floor level (Figure 97.4). The lath and plaster construction was visible in places. In the apex of the gable was an infilled opening (either a window or ventilation), with a later inserted small window just above the line of the surrounding roof. Running up the east wall is the structure housing an external staircase.

The south wall is largely blank with a single blocked door at first floor level (Figure 97.5; see below). The bottom half of the wall was obscured by brick walling dating, at least in part, to the 18th century (see Structure **105** below). Observation of this relationship was difficult, but it appears that Structure **72** was built hard up against **105**, to the extent that the lower part of this south wall of **72** was never closed in with lath and plaster (Figure 97.6).

Roof

As observed the roof was pitched and covered in artificial slate. There is no evidence as to how closely this resembles the original.

Interior

Ground Floor (Figure 98)

The ground floor, which is now open, was formerly divided into three rooms, each with a window to the north. A faint scar on the south wall indicates the position of a former internal staircase leading to the first floor (Figure 98.1). It is not clear where ground level access to the ground floor would have been located. The west gable wall has been removed and the opening in the north wall is clearly a late insertion. Between the east and middle windows in the north wall is an area of brick infill that may represent an earlier door (Figure 98.2), but it looks more likely to be a later insertion or repair. There is also a door opening in the east gable wall, although it was not possible to determine whether this is an original or later feature, the general impression is that it too is later.

At ground level the construction of the building was exposed. The building is a timber frame in-filled with lath and plaster set on a brick dwarf wall four courses high. The dwarf wall has one course of 'black' bricks set on three courses of white/yellow bricks.

First Floor (Figure 98)

The first floor was an open studio space with large opening windows along the north wall. It was also approached by a later covered external staircase against the northeast comer. Fragments of 'artistic' wallpapers survive beneath later decorations on both floors, including a

scheme of foliage on the internal staircase and a variety of successive patterns on the ground floor (Figure 98.6-7). The first floor ceiling is tongue-and-groove. In the east end of the south wall is a blocked doorway. The form of the frame suggests that it is a late insertion, possibly intended to provide access to a fire escape that no longer exists. Externally there was no evidence for a more substantial stair.

The external staircase, which accesses the first floor in its northeast corner, appears from the outside to be a secondary feature. It is brick built rather than plaster and lath and is quite precariously supported on a late looking red brick wall to the east and a wooden 'leg' on its north west corner which appears modern and is likely to be a replacement. Internally, however, the picture is not as straightforward. On the first floor the pattern of windows ends with a 'half' window at the east end, however it is an opening casement in its own right rather than half of a blocked or removed larger window as is seen at the west end. It is possible that there were originally nine windows, there is certainly space to complete the run across the whole first floor, but if this is the case then no trace of the 'missing' windows survived. Additional evidence is present on what would be the outside wall of the studio but within the staircase structure, where there are the remains of a dado rail and moulded skirting with decorated analypta wallpaper between (Figure 98.8). Truncation of this decoration suggests that the present door to the first floor is a later insertion, but that it is a replacement for an earlier door integral with the decorative scheme. The most likely interpretation is that there was always an external staircase attached to the building, but that the structure seen during recording is a replacement for the original. It is also possible, if a little unlikely, that access to the building was at first floor level, with the internal staircase used to access the ground floor. This would explain the apparent lack of a ground floor entrance, but does seem an unorthodox arrangement.

Discussion

The figurative painter and engraver Robert Farren was born on 5 March 1832 in Cambridge. His work was exhibited in London between 1868 and 1880. particularly at the National Gallery and at Suffolk Street. Spalding's Directory for 1878 lists R. Farren 'artist's studio' as one of the occupiers of No. 20 St Andrew's Street and it is possible that the studio was purpose-built for him, although W. Maitland, a photographic artist, is listed there in 1866/7. Farren published two books of Cambridge views in 1881 but moved to Scarborough for health reasons in 1889, although he continued to paint college portraits into the 1890s. He had returned to Cambridge by 1901, however, and lived there until just before his death in Highgate (London) on 17th December 1912. As well as exhibiting in several London galleries he also exhibited in Manchester and Liverpool. The Sedgwick Museum at Cambridge University and Bank House Gallery, Norwich both hold his work. Robert's daughters Mary, Jessie, Amy and Nellie were also artists while son Ernest was a photographer and Alexander a picture dealer. Robert's father, William Farren, was one of the first photographers to set up business in Cambridge. A Miss M. Farren (artist and porcelain painter) is also listed at the address between 1878 and 1881. It is likely that they shared use of the studio building during that time. Miss Jessie Farren exhibited miniatures from Scarborough in 1886 and 1893.

The later history of the building is difficult to distinguish as being separate from **No. 20** there being many individuals and their occupations listed. It is possible that it was used as part of the school that still operated in the late 1890s, but no information is currently available. In the 20th century it was

used as a store by Emmanuel College, until being absorbed into the Robert Sayle complex in 1982.

Structure 48

(Figures 99-103)

Structure **48** is older than most of the structures around it, with **47** to the east, **93** to the north and the modern offices of **49** added to the west and at least externally retains some of its original features.

Exterior

Elevations (Figures 100 & 102)

The north side of 48 shows it to be of two storeys, built from a grey/white brick laid in Monk or Flying Flemish bond (also known as Yorkshire bond) (Figure 102.1). When first observed most of the north elevation was obscured by 51, a full height plastic-covered external staircase, and 93, the 1972 extension to the west of 47. Observation during demolition and of 1960s and 1970s photographs shows that this elevation was much altered from its original state, particularly the ground floor, even by the 1970s. Originally there were (probably) five segmented-headed windows on the first floor, of which only two have survived (Figure 102 3). The sides of the windows are chamfered and they have stone sills. The ground floor has been more significantly altered, with none of the openings seen being original. There had been at least one segmented-headed window at the east end (visible on photographs of 1964 and 1972 and see below, ground floor) and presumably others long since removed. It is unclear where the original access door was on the ground floor, but it seems likely to have been below the westernmost of the surviving first floor windows, but subsequently replaced by a later opening. The double width door at the west end and the window immediately east of it are post 1970s insertions (Figure 102 2). Most of the north wall at first floor level has been removed with or since the construction of 93.

The eastern end of the building is subsumed within **93**, surviving in part on the ground floor but not at first floor level.

The south elevation is mostly visible; the eastern end is obscured behind the modern Counting House **79**, and the garages **78** (Figure 102.6). The ground floor is blind, laid in Monk or Flying Flemish bond, the same as the north. As observed there are two full-size windows at first floor level, these have a chamfered brick surround with metal replacement frames, and flat heads rather than the segmented to the north. There are two clear areas of more recent brickwork, probably representing the locations of windows now removed. In the westernmost of these is a shallow inserted window with three four-pane lights slightly off-set from the blocking. At the far west end at ground level are the remains of an old garden wall apparently an integral build with the original structure (Figure 102.7).

The west gable end is visible only above the roof line of the 1972 office extension **49** (Figure 102.5). Again this is constructed in Monk or Flying Flemish bond, with a small opening blocked in with red brick. A photograph from 1972 suggests that this wall was largely blind with only one other small window at first floor level, which does not appear to be original.

Roof

The roof is ridged and covered in Marley tiles. It is hipped to the east, gabled to the west. This appears to be the intended arrangement.

Interior

Basement

As observed there was no basement in this building. Evidence from the archaeological excavation, however, demonstrated that there had been at one time a small square (1.75m x 1.75m x 1+m deep) brick floored cellar in the northeast corner (Cessford 2007: 151, fig 52).

Ground Floor (Figure 103)

As observed the ground floor surface was poured concrete. However evidence also found in the excavation showed that at least the eastern two thirds of this floor had at one time been raised on a series of dwarf brick walls, which survived to a height of around 0.70m (*ibid*). The finished floor height was probably not far off the height as observed, but was designed to allow air to circulate beneath a presumably wooden floor.

The layout of the modern ground floor has most of it as a large open space, used as the receipt and dispatch dock. In the north wall are two tall (2.92m) double-width openings. To the east of each of these is a square window (1.42m), with the lintel at the same height as the doors, the base 1.57m above the ground. All these openings are late insertions and parts of the wall have been rebuilt around them. All have modern flat lintels. 13.9m from the west end two spur walls jut out about 0.50m into the space. This marks an earlier division of the building and coincides exactly with the start of the dwarf walls observed in the archaeological excavation, indicating that the one-third/two-thirds division of the ground floor is an original feature of the building. As currently configured the easternmost 4.60m of the ground floor is divided off into three small offices separated from the rest by a block-work wall. In the north wall of the largest of these offices is evidence of a blocked opening (Figure 103.3), presumably the ground floor window seen in the 1964 photograph. At this ground floor level the eastern wall of 48 has been retained marking the line at which 47 previously ended.

First Floor (Figure 103)

The east end of the first floor has been largely removed beyond the line of the wall of **93**, with only part of the south wall and the roof surviving and a cased beam to **47** (Figure 103.4-5). Two original windows survive in the north wall (Figure 103.7). Based on photographs a third would originally have been between these, but there is no trace of it as most of this section of the wall has been rebuilt, presumably as part of the 1970s work. The missing windows further east would have been in the removed section of wall beyond **93**. A modern opening has been made between the two surviving windows to provided access to the fire escape **51**. Compared to the later windows on the ground floor it is worth noting that the original frames are placed to the inside of the wall whilst the later ones are placed to the outside. There is some evidence to suggest a near central flue or fireplace in the south wall.

Based on the external view the two larger windows in the south wall are original, but their replacement frames have been reset to the outside edge of the wall (Figure 103.8). Here also there is significant evidence of rebuilding, particularly between the two windows. The shallow window is broadly in the location of an earlier window but is offset slightly to the east. A section of the south wall has been removed to create an entrance through to **79**, the modern Counting House.

Discussion

Other than being clearly older than the buildings around it, **48** was unprepossessing when recorded, its original purpose not at all clear. Additional information from the excavation, however, shed a different light. The series of dwarf brick walls occupying the western two-thirds of the ground

floor indicated the presence of a deliberately raised floor, presumably timber, beneath which air could circulate, perhaps in order to provide drying. Documentary evidence, principally plans of the developing store during the late 19th century (specifically Figure 69) show that this was built as a down room, presumably associated with the preparation of feathers for stuffing and decoration. The structure was first seen on a plan of 1889, where the name is given to the whole structure. By 1898 most of the building is labelled "Coach House" with only the small room at the east end still called a down room. This is a purpose built structure constructed as part of the ongoing development of the Robert Sayle store between 1877 and 1889.

No. 21 St Andrew's Street 70, 71, 78, 79, 80, 81, 82, 83, 105, 110 (Figures 104-113)

No. 21 St. Andrew's Street is known as "The Chalice" after an Inn on the site dating to at least the 16th century. The present building is early 20th century in date in a version of the Queen Anne style. It appears to have been built for Emmanuel College, whose arms appear on the front, and has been most recently used as student accommodation with an off-licence occupying the ground and basement levels. The building has a basement and three floors, the uppermost being an attic in the roof-space. Immediately prior to survey the interior of the building had been subject to considerable vandalism by the occupants and many of the interior fittings and fixtures had been removed or damaged. This is reflected in the photographs and the lack of fittings and fixture detail in some areas. Offensive graffiti has been obscured in the photographs where appropriate.

Exterior

Street Frontage (Figures 106 & 108)

The building is faced in a dark red brick with stone string lines and window details. Much of the ground floor is taken up with a modern shop window, but at the south end is an ornate doorway with a heavy wooden door and fanlight above. Either side of the door is a square pilaster with a plain capital. This feature is repeated either end of the window, with a double set at the north end.

At first floor level are two large windows, framed in stone, with stone mullions. There are three lights above and three below, the lower set occupying one-third of the height of the window. Of these the outer two of the taller lights and the middle of the smaller are opening casements. The middle section of the wall is blank brick in English bond. Between the first and second floors is a stone stringcourse.

Above the stringcourse are two windows similar to those on the first floor, but slightly shorter in height (25 brick courses compared to 27 on the floor below) adding false perspective to the building face. Between the windows is a large stone carving depicting the Emmanuel coat of arms with a chalice at the base. Above this is a second stone stringcourse with a blind parapet rising above in front of the roof.

Rising through the full height of the front of the building are four brick pilasters, each decorated at the top of the parapet with a stone geometric shape. At each end is a tall pyramid and in the middle two are globes (Figure 108.4-5).

South Elevation (Figures 106 & 109)

The south wall of the front range is visible only above the roofline of **No. 22**, which equates to the roofspace. Above the line of **No. 22** sixteen courses of yellow brick are laid in English bond. Above this the wall is built in a dark red brick similar to the front, also in English bond. The wall rises flush to a chimney stack. Behind the front range is a rear wing at right angles, the roof ridge of which meets the front range approximately half way up the roof. This has three floors, the uppermost of which is partly within the roofspace. At ground floor level a door opens onto a staircase, lit by two arched windows, with a round window above on the first floor. The windows are all casements with angled heads above the two on the first floor and flat heads on the three on the second floor. The largest window on the second floor is set in a dormer extending slightly into the roofline (Figure 109.1-2). The door is panelled with a brass handle and decorative bell pull to the right (Figure 109.3-4).

Rear Aspect

The rear of the building has a small part of the street range visible, the rest occupied by a rear wing rising to three storeys (Figure 109.5). The whole is constructed in a yellow brick laid in English bond, with two slightly round-headed casement windows, one at first and one at second floor level. The gable end pitches steeply with a parapet rising slightly above the roof level. At ground floor level the wing extends further westwards, in what seems to be a contemporary build with the rest, also in yellow brick laid in English bond. A small out-shut to the rear of this is also contemporary but other extensions have been added at a later date in a different yellow/white brick and bond. At the northwest corner a ramshackle corrugated shelter gives access to a delivery ramp to the cellar most recently used by an off-licence (Figure 109.6).

North Elevation

The north side of the front range extends only slightly above the height of the roof parapet above **No. 20** next door. It is constructed/faced in the same red brick as the front. The rear wing has a blank face in yellow brick laid in English bond.

Roofscape (Figure 109.7)

The street side of the range has two pitched dormers with casement windows and a rendered dormer-head. Both the dormers and the roof are tiled with red, yellow and dark grey ceramic tiles. The rear of the street range and the rear wing, however, are tiled in modern dark dull purple-red tiles. The ridge on the street range is red ceramic, on the rear wing concrete. There is a single small flat topped cat-slide dormer on the south side of the front range rear roof.

The front range has two chimneys, one at each gable end, both built in the red brick of the front elevation. They are slightly different to each other in style: that to the south with a simple corbel two courses from the top, that to the north flared upwards. A further stack rises from the eaves line on the rear wing. This is built from the same yellow brick as the rest.

Interior

Basement (Figure 110)

In recent years the basement has been used for storage for the ground floor off-licence and is a large open area extending beneath most of the building above (Figure 110.1-2). The walls

are painted brick laid in English bond. A small area of truncated vaulting at the street end indicates that the space may have been previously divided into smaller 'rooms'. A staircase rises to the ground floor on the south side (Figure 110.3).

Ground Floor

The ground floor has largely been opened through so that its original layout is no longer apparent. Most recently it has been used as an off-licence (Figure 110.4-5). To the rear double doors open through **83** and out into the yard behind (Figure 110.6). **81** and **82** are small single storey outhouses built in brick.

Access to the upper floors of the building is unconnected to the ground floor shop and is reached via a passageway on the south side, which, unusually on this street, has not been closed in.

First Floor (Figure 111)

The first floor is accessed via a concrete staircase from the passageway to the south side of the building (Figure 111.1). The top of stair opens into a small hall from which open a series of rooms and the stair to the second floor (Figure 111.2). At the front (east) are two rooms, originally a suite, entered via a small lobby off the hall. Although 20th century in date, both these rooms have 18th century style cornices and wide skirting boards. The southern room has a fireplace on the south wall and a large casement window in the east (Figure 111.3). The north room has a fireplace on the north wall and similar large casement window in the east (Figure 111.3-4). The fireplaces in both rooms have been recently removed, but were presumably cast iron.

The rear room, although now subdivided with a small bathroom, was originally one. Set into the fireplace space is a large deed or legal cupboard (Figure 111.6-7). This reflects use as a solicitor's office in the early 20th century. This rear room does not have the elaborate cornicing seen at the front, but does have the wide skirting boards.

Second floor (Figure 112)

The second floor has three main rooms, two at the front, one to the rear. The southeast room has been subdivided forming a kitchen and bathrooms. The two front rooms have a moulded cornice, much less ornate than that on the floor below, and a deep skirting. The front north room is entered through a small lobby. There is a fireplace on the north wall and a large casement window in the east wall (Figure 112.1-2).

In the front south room the cornice and skirting survive but otherwise there are few original features. There would have been a fireplace on the south wall but this is now occupied by kitchen fittings.

The rear room is also accessed via a small lobby. The room is set slightly into the mansard roof of the rear wing and has a deep skirting but no cornice. There is a small casement window in the south wall and a larger one in the west wall (Figure 112.3-4).

Between the rooms a hall gives access to the stairs to the third floor (Figure 112.6).

Third Floor (Figure 113)

On the third floor there are two rooms set into the roof space of the front range, with an attic/loft area in the top of the mansard to the rear. The front south room has a fireplace in the south wall (recently removed but presumably cast iron) and deep skirting boards (Figure 113.1-2). The window, in the west wall, is a casement in a dormer extending down to floor level. The door and frame are shaped to match the slope of the ceiling.

The front north room is the mirror image of the south one, the fireplace again recently removed (Figure 113.4-5). From here there is access to the roof space to the rear. The wooden components in the roof are clean and machine cut, confirming the late date of the building (Figure 113.6).

Discussion

The present structure of **No. 21** St Andrew's Street is relatively modern (early 20th century) although built in a much older style. The Reverend H. P. Stokes refers to it as the "restored building" in 1915 suggesting the rebuild dates to just before the First World War (Stokes 1915: 38). A property on this site was valued by William Custance in 1802 and was described at that time as 'old' (Cessford 2007: 176). Whether the current building is a direct replacement for that, or whether there was another phase of building in between, is not clear. The building was occupied (both domestically and commercially) by wholesale and retail grocers for many decades. In 1700 the property was leased to James Fletcher, a grocer who was Commissioner of Taxes in 1701 and mayor in 1705, dying in office in 1706. Grocers or chandlers of one sort or another remain in occupation throughout the 18th century including the Headley family who retained an interest until about 1817. By 1839 the property was being leased to Edward Jay, grocer, of whom more below. The property remained, at least in part, a grocers throughout the 19th and 20th centuries (principally as Flack and Judge between 1895 and 1947) until 1965 when the last grocers, Matthew and Son Ltd., left. In 1913 one occupant of the, by now presumably rebuilt, property was Lyon & Son, solicitors and superintendent registrar, which probably indicates an installation date for the legal cupboard on the first floor.

Structure 70 (71)

(Figure 114-123)

70 is a free standing brick building within the plot to the rear of **No. 21**. It has three storeys with a small basement/cellar at the east end. **71** is an external metal staircase on the north side.

Exterior

Elevations (Figures 115, 117, 119, 120)

The north elevation shows **70** to be constructed from grey Cambridge bricks laid in Flying Flemish or Monk bond (Figure 119.3). At the northeast the corner has been rounded (Figure 120.4). There are eleven windows, although the position of a 12th (now replaced by a late doorway) is quite clear. The segmented-headed windows are arranged symmetrically in pairs on each floor either side of a central set of doors. Although these doorways have subsequently been altered, their original size and locations are evident, giving symmetry to the whole face. Only two of the windows have their original frames, these being either side of the central door on the first floor. All the ground floor and the second floor west windows have been bricked-up (Figure 119.1), in the remainder the metal frames have been replaced by 20th century glass louvres (Figure 119.2). The central door openings were originally double-width and were presumably the means by which goods were loaded into the building.

The large lintels remain, but on the ground and first floor about half the width is taken up with a modern door. These use the original opening edge on the east side, but have been bricked up to narrow the opening on the west side. The second floor opening has been entirely bricked-up other than for a four-pane shallow window immediately below the lintel. To the east side of the first floor door were recorded a group of six brick-sized wooden blocks set into the fabric of the wall (Figures 116 & 121). One was blank, but five carried sets of initials and the date "1845". Reading from left to right the initials read "E.J., J.M.J., J.B., M.J.A.J., and E.J.". The significance of these is discussed below, however it is important to note that they are clearly integral with the construction of the building. Based on the in-filling bricks and doors, the alterations to the north face of **70** were carried out in the 20th century. The wide openings on the ground and first floor were partially in-filled and fitted with standard sized doors, and the opening on the second floor entirely in-filled except for a shallow window. A third door was inserted in the position of one of the second floor windows and an external staircase (**71**) added giving, in modern times, the only means of access between the floors.

The east wall of **70** has a single segmented-headed window at second floor level and is blind at the first floor (Figure 120.1-3). On the ground floor are two windows either side of a doorway. The southern of the windows is larger, the northern one rather smaller. A set of steps descends to basement level where there is a window to the south and a door. All openings are contemporary to the construction of the building. The original frame of the second floor windows has been replaced with louvres, the other three windows have been bricked-up.

The south wall of **70** is blind (Figure 120.6).

The original form of the west wall of **70** is not discernable, it may have been blind or had central windows, but the evidence is now absent. In its current form the face has three wide door openings set centrally, but these are clearly late insertions, possibly even 20th century, and probably contemporary with the alterations on the north wall referred to above (Figure 120.4-6).

Interior

Basement

Access to the basement was restricted for health and safety reasons and only a single visit was possible while the building was standing. The basement is small (3.6m west-east, 4.8m north-south) and located at the east end of the building (Figure 122.2-3). The walls have remained bare brick, with a doorway and blocked window in the east wall. On the south wall is a large (for the size of the room) fireplace, 1.56m wide. The floor above is supported on plain joists running west - east, although in the central area some attempt has been made to provide additional support with a re-used beam and wooden posts. The basement is accessed externally via a flight of eight brick steps (Figure 122.1).

Ground Floor

The ground floor is divided into two with the eastern third separated from the rest by a brick wall in stretcher bond, compared to the Flying Flemish bond of the rest. The line of this wall meets the north wall part way across one of the blocked ground floor windows, suggesting that it is not an original feature. The windows in the larger room are bricked-up flush with the wall, as is the partly blocked door opening. The ceiling joists run north – south, 7" x 3" at 14½" centres. An axial support beam runs the length of the room supported on two circular iron posts (Figure 122.3-4). As a brick pilaster has been built into the dividing wall to support the axial beam at its east end, it is possible that the beam and iron pillars are also not original features. There is no evidence of a lath and plaster ceiling in this part of the floor.

Externally the small east room has two windows in the east wall and one and a half in the north wall, none of these are visible internally. There is a large fireplace on the south wall similar to that below in the basement (Figure 122.6). The ceiling joists are similar to those in the larger room, but without the axial support beam. There are traces on the joists of a

previous lath and plaster ceiling. A smaller beam is orientated east—west just north of the doorway. Mortice holes cut in the underside of this beam show that at one stage there was a stud wall dividing off the northern third of the space (Figure 122.7). The smaller window is within this division and it is possible that this represents a counting house or similar.

First Floor (Figure 123)

The first floor is a single space with a central axial beam supported on three circular iron posts. There are four windows in the north wall, of which only the two either side of the inserted door have their original metal frames (Figure 123.1-2). Towards the east end, projecting from the south wall, is the brick stack from the fireplaces on the basement and ground floors. There is no evidence for a fireplace on this floor. The newer loaded door is inserted in the west wall. The ceiling is constructed from north-south joists stiffened with crossed-braces. There are no traces of a lath and plaster ceiling, though more recently a ceiling was formed from fibreboard. Above the second window from the west is a trimmer joist. New timber has been inserted, but this marks the location of an internal staircase between the first and second floors. There is no evidence to indicate whether it ran up west to east or east to west. In the floor below the same window is evidence that part of this has been re-laid. This may indicate the position of a stair running up from the ground floor.

In the wall immediately east of the third window from the west a brick has been carved with the initials E.J. and the date 1845 (Figure 123.3). Although clearly contemporary with the wooden blocks on the outside of this floor, the execution is rather more crude, but possibly by the same hand. Whereas the wooden blocks were certainly carved elsewhere and inserted, this was probably done *in situ*. Curiously the '4' of 1845 has been reversed.

Second Floor (Figure 123)

The second floor is a single room, extending slightly into the roof space. The roof structure has five bays with king post and strut trusses (Figure 123.3-4). The original frames of the windows in the east wall and at the east end of the north wall have been replaced with modern glass louvres. The next window to the west has been replaced with the inserted door and the western window is blocked up. The old loading door is infilled with a shallow four-pane window at the top of the space. At the east end of the south wall the brick stack continues upwards, kinking to the west as it rises (Figure 123.6). The newer loading door is inserted in the west wall.

Discussion

The history of buildings on the footprint of **70** is longer than that suggested by the standing building as recorded. The first documentary record of a warehouse in the yard behind **No. 21** is in 1744, when **No. 21** is occupied by the Headleys, a family of tallow chandlers. In 1823 a valuation of the property refers to a chandling office in a poor state of repair and in 1839 a brew house is mentioned. Around 1839 the property was leased to Edward Jay, a grocer, and in 1845 the warehouse was rebuilt at a cost of £200. This would seem to be the building that was recorded. The archaeological work saw evidence for at least one earlier versions of a structure on the same footprint of which this one was merely the last. This explains why a building more typical of the 1840s was apparently present on Baker's map of 1830. Here the documentary, archaeological and building records match very neatly. The date on the carved blocks and bricks in the warehouse is 1845, the year we now know from documentary sources that the building was reconstructed.

The initials are also identifiable via census returns: E. J. – Edward Jay the grocer; J. M. J. – Jane Maria Jay, his wife (who died in 1851); J. B. – James Baker (originally Edward Jay's assistant, but who ended up running the business in 1867); M. J. A. J. – Maria Jane Anne Jay (Edward's eldest daughter) and E. J. – Edward Jay Junior (who ran the business for nine years before it was taken over by Baker). It is interesting to note that at the time they were placed in the wall the inscribed blocks, at first floor level, would not have been easily visible from the ground, indeed they were only seen during the building recording because the later external staircase gave access to that location. It is possible that the Jay's, anxious to leave their mark on the building even though it was constructed at the College's expense, deliberately placed the blocks out of the casual observer's line of sight.

Structure 105

(Figure 124.1-3)

Structure **105** survives only as a wall in the yard behind **No. 21**, immediately adjacent to structure **72**.

Little survives of **105**. The older build, aligned west – east along the northern boundary of the yard behind property **No. 21**, survives 23 courses high in an irregular bond (which in places is more-or-less formal Flemish bond) with a single course of on-edge headers at the top. This upper course indicates that the wall is not structural but was built to mark the boundary. The bricks of **105** measure $8\frac{3}{4} \times 4\frac{1}{4} \times 2$ inches. The older build has been 'wrapped around' by later brick builds extending the wall out and up. There is evidence on the south side of the wall for what might have been return walls, but later examination of the north side showed to be pilasters providing additional support to a structure that is otherwise a 9" wall. Although only two pilasters were observed on the south side, the subsequent removal of the structure to the north showed that there were three. Each of these is $2\frac{1}{2}$ bricks wide (0.48 - 0.49m), spaced at roughly 2.80m (9') intervals. On the south side these have been cut back to the face of the east – west wall leaving broken bricks still visible.

Discussion

Based on the bricks within its build **105** represents the remains of an 18th century boundary wall marking the northern side of the yard behind **No. 21**. The property plan of 1874 shows a structure hard up against it and it is likely that this was the reason the pilasters were cut back. There is no reason to doubt that the wall is contemporary with the bricks and is therefore 18th century in date.

Structures 110 and 45

Figure 124.4-6)

110 is a boundary/garden wall extending westwards from the southwest corner of Structure **70**. **45** extends from the southeast corner of Structure **70** east to Structure 84.

110 is constructed from soft red 18th century bricks laid in Flemish bond. It stands 23 courses high with a further six courses added above in a later white brick. It extends westwards from

the southwest corner of **70** for 9.55m. At the west end are the remains of a return to the south (behind **No. 22**) which has been cut back to the plane of the east-west wall. The east-west wall is 9" (0.23m) wide, the return 14" (0.355m). Beyond the point of the return the boundary continues as a brick wall of much later build.

45 appears to be contemporary or slightly later in date than Structure **70**. It is constructed from grey Cambridge bricks laid in Flying Yorkshire bond, similar to the structure. The build is not bonded to **70** but sits immediately south of it over lapping the southeast corner by about 1.50m

Discussion

If the construction of **110** is contemporary with the bricks it is built from then it must predate construction of **70** by some interval. If **110** had been wholly or partially rebuilt at this time it seems unlikely that the 'purity' of the bricks used would have been maintained. It is likely, therefore, that **110** is an 18th century survival rather than a 19th century rebuild.

In contrast **45** is probably roughly contemporary with Structure **70**, although built after the latter's completion. There is a documentary record of a wall being rebuilt during the Jay's occupation (in 1848 at a cost of £16). Given the similarity between the two structures, in both brick and bond, it seems likely that **45** is the wall being referred to being constructed only three years after completion of Structure **70**.

Structures 78, 79, 80

(Figure 125)

These are a group of 20th century brick structures built against the boundary between **No. 20** and **No. 21**. **78** is four lock-up garages and **80** a single storey lean-to shed. **79** is elevated above the garages, supported on brick columns at the southern end, and was most recently the Robert Sayle's Counting House. It was accessed primarily from within **47/48** to the north (see above).

No. 22 St Andrew's Street

84

(Figures 126-128)

This Grade II building has three floors. It was gutted by a fire in March 1969 and subsequently rebuilt to a new plan behind a street façade that is either the only survival or recreates the earlier frontage.

The RCHM(E) described the building in 1959 as 'of two storeys with attics, has walls of gault brick and tiled roofs. It was built c.1730. The ground floor has since been cleared for a shop. Towards the street, the shop front is of the late 19th century; on the floor above are two windows with flat-rubbed brick arches and sash frames flush with the wall-face. At the eaves is a timber modillion-cornice and on the roof are two large dormer-windows with

pedimented gables. The back wall is gabled and has two deep plat-bands; it contains a doorway with a fanlight in a doorcase with panelled pilasters and console-brackets supported a broken pediment hood with medallion-cornice. The windows here have high segmental heads. Inside, access to the first floor is now by a stair in the adjoining building. At this leave the E. room is lined with original simple panelling; all the rooms have cornices, and the original staircase surviving up to the attic has cut and bracketed strings, turned balusters, columnar newels and moulded and ramped handrail.' (RCHM(E), 1959: 333, no. 167). Prior to the fire Pevsner included No. 22 as part of his 'nice early 18th century group' referring to Nos. 22-24 (2001: 246-7).

Following reconstruction after the fire the open pedimented doorcase is now at the north end of the front. The first floor is built of narrow bricks; the two dormer windows to the second floor have moulded pediments. Inside the staircase appears to be a copy of an 18th century design (Figure 128.5) but the materials are 20th century and the central location is unlikely to be that of the earlier stair.

84 is a 1980s three-storey extension to the rear of **No. 22**. It was not possible to ascertain whether there had been a basement to **No. 22**; as recorded there was a solid concrete floor on the ground floor. Subsequent archaeological investigation did not extend into this area.

No. 23 St Andrew's Street 85, 99, 104, 106, 107 (Figures 129-143)

The building comprises a basement and four storeys and is listed Grade II. The plan of the older, 18th century, part of the building has front and back ranges which both extend over the full width of the property. Between them a staircase ran from basement to third floor. A second, service, staircase occupied a turret which also had a series of small closet rooms at the south west corner of the building. The front room retains part of its original 18th century full-height panelling on the north and south walls. The former stair hall has reset panelling, perhaps from the east wall of the back room, on the south wall and the back room has full-height panelling on the north and south walls. Other 18th century features survive in rooms on the first and second floors. Although listed the building is not described by the RCHM(E) in the 1959 Cambridge volume. Pevsner, however, included it as part of his 'nice early 18th century group' referring to Nos. 22-24 (2001, 246-7).

Exterior

Street Frontage (Figures 130 & 135)

At ground level is the late 19^{th} century shop front with a recessed doorway between two narrow display windows. The shop face is flanked either side by pilasters with an ionic style capital and console above. The shop front occupies about $\frac{3}{4}$ of the ground floor with a door accessing a staircase at the north side. Although the door itself is more recent the frame is 18^{th} century in date and has shutters either side.

Above the ground floor the street front is mid-18th century, of red brick laid in Flemish bond with the three floors indicated by moulded plat bands just below each pair of sash windows. The sashes are early 19th century in date. The storey heights diminish upwards with the first floor 44 courses high, the second floor 39 courses and the third floor 25 courses; the window heights diminish on each floor accordingly. At roof level the front has been heightened by eight courses of newer brick in stretcher bond and a coping course of stone. This conceals a modern flat leaded roof with a large skylight to the rear.

South Elevation

The south elevation, visible only above the roofs of the adjoining buildings, shows that the red brick front is a façade attached to a build of mostly white/grey bricks laid in an irregular English bond (Figure 135.3). It is also apparent that the wall height has been raised to "square-up" a structure that was previously gabled to north and south. There are three chimney stacks on the south side: a large one (six pots in a row) towards the front, (presumably originally on the south gable); and two smaller ones (two and three pots respectively) set close together on the gable end of the rear range.

Rear Elevation

The rear elevation is partially obscured by a 20th century extension, but above that (at third floor level) is built of narrow grey/white brick laid in English bond (Figure 135.5). The wall is the west side of the rear mansard roofed range parallel to the street. At third floor level there are two original openings (Figure 135.6). To the north is a blocked window infilled with bricks, very similar to the wall build, but less dirty (Figure 135.7). This has a segmented arched head. To the south is a much larger opening, originally a window, but now with a door inserted into the north side to provide access to the flat roof of the modern extension. A third floor window is set as a shallow dormer in the roof.

At ground level an 18th century iron handrail has been reset on the modern steps of the rear door to the 1970s extension (Figure 135.8).

North Elevation (Figures 131 & 136)

The north side, initially visible only above the roof of **No. 22**, had been cement rendered and no details were visible prior to the demolition of the rear of **No. 22**. This revealed that, at least this side of the building, was a timber-frame construction (Figure 136.1). The bricks of the west side did not extend along the north face ending on a straight joint line after one header and one stretcher. The north face frame had clear traces of the lath and plaster/render that had previously covered it. From level with the roofline of **No. 22** the wall is cement rendered, which was shown from observation inside (see below) to be just a skin of render applied to a modern metal mesh attached to the timber frame. This is presumably contemporary with the rebuilding of **No. 22** in 1970.

Following demolition of part of the rear of **No. 22** a substantial section of the timber frame forming the north wall of **No. 23** was partially exposed. The record of this combined with three sections of the frame that were recorded in detail inside the building (see below) has allowed a partial reconstruction of the frame. It should be noted that recording of the external face of the frame was only possible from ground level.

The frame consists of two principal sections: one extending through the ground and first floors, the second through the second and third floors (Figure 131). The lower frame has three visible (but presumably four altogether) posts extending to the full height of the frame between a presumed sill beam, which was not seen, and an upper wall plate. Within this two sets of girder beams were noted, one just below the ground floor ceiling height and the other just below first floor ceiling height. Neither of these support floor joists which in fact run parallel to the frame from back to front within the structure rather than from side to side. The girder beams are tenoned and pegged into the sides of the vertical posts, whereas the upper

wall plate is above the posts, which are presumably tenoned into it. The beams and posts form boxes, at least some of which have been stiffened with pairs of down braces which, where observed, run down from the vertical post to the horizontal beam. Presuming a post at the front of the structure these boxes measure, from east to west (*i.e.* front to back) 3.40m, 4.45m and 3.60m wide. Beyond the easternmost post the frame extends a further 0.93m meeting the rear wall brickwork and there does not appear to be a vertical post at this point. Within this structure are set vertical studs to which the lath and plaster were fixed both internally and externally. The studs are cut round the diagonal braces. Given the internal arrangement of the building into a front and rear room either side of a stair hall it was anticipated that the frame breaks would follow this pattern; this does not, however seem to be the case. The front box extends for about two-thirds of the depth of the front room; the middle box then extends across the remaining third and the entire width of the stair hall. The rear box and the rear extension together cover the depth of the rear room.

The upper frame was more difficult to record as, at least externally, less of it was visible. There do appear, however, to be some differences compared with the lower frame. Broadly the pattern is similar with vertical posts, horizontal girder beams and a top wall plate with internal bracing and studs between posts and beams. At second floor level, at least in the stair hall and rear room, there appears to be an additional set of girder beams with bracing at a lesser interval. The internal recording shows that this does not extend into the front room on the second floor or above. The pattern of the remainder of the frame is similar to that of the lower frame.

The upper and lower frames appear to be separate with the lowest beam of the upper frame actually set about 0.06m below the top of the lower frame. Support for the upper frame appears to be from posts that extend to ground level but which are not part of the lower frame. Only one such post was actually observed, however, and it had been cut off above ground level. The precise mechanism for support of the upper frame is not clear.

All the wood observed within the frames was squared and sawn with little evidence for re-use of timber. Some timbers did have evidence of un-used joints but at least some of this, particularly on the vertical posts of the lower frame appeared to relate to elements, now missing, extending to the north. This could suggest that prior to the 1969 fire that destroyed the rear of **No. 22**, there was a degree of coincidence between the frames of the two structures.

Stair Turret (106)

From the rear elevation a turret extends westwards containing a service staircase (Figure 136.2, 5, 6). Probably late 18th century in date, this is at least in part a timber frame construction (north side) with brick on the south and west sides. As initially observed part of the west face and the north face were rendered with cement, and below third storey level on the west face the original brick had been replaced by bricks matching those of the 1970s extension. Observation during demolition showed that the structure was timber framed with lath and render on the north face for its entire height, this frame being keyed into the brickwork of the earlier building (Figure 136.3). Due to difficulties of access it was not possible to record this frame in any detail. The turret has a hipped tiled roof with a chimney on the south-west corner. During demolition the roof structure was exposed (Figure 136.6). This demonstrated a rather crude quality of workmanship with the roof timbers nailed together and no evidence of joinery.

Roofscape

The front part of the building has a modern lead-covered flat roof. The rear range has a mansard roof covered in ceramic tile, the eastern side of which has been encompassed by the later flat roof. The roof area has seen significant change from the original and it is probable that the earlier arrangement had pitched or mansard roofs over both the front and rear ranges.

Interior

Basement (Figure 137)

The basement is now one large room but it was formerly two, which were separated by the stair. The ceiling of the eastern room and the staircase area has been lowered and the floor has been dropped to maintain head height. Both rooms had a hearth against the south wall. The front had a long window at pavement level. A coal cellar with a segmental brick vault was added below the pavement in the 19th century. The rear room probably retains its original floor and ceiling heights and it formerly had a high-level window. There is access to the bottom of the service stair where a few original steps remain.

Ground floor (Figures 132, 138, 139)

Originally access to the ground floor was by steps from the street to a doorway at the north end of the façade. 18th century hinged shutters survive as the sides of the door-case but the door itself is 20th century. This door now opens on to stairs to the first floor but originally it led into a passage alongside the front room and into a central stair hall. That staircase has been removed and the walls have been opened up to make one large room, which is the whole depth of the building although it has two floor levels, the front having been reduced by 0.80m to street level. The front room retains part of its original 18th century full-height panelling on the north and south walls; where the floor has been lowered this has been extended with tongue and groove wainscot. Towards the east end of the south wall are the remains of a substantial brick fireplace and chimneybreast (Figure 138.4). This is constructed from red unfrogged bricks (8¾ x 4¼ x 2 inches) and shows the soot-stained flue from the basement kitchen fire splitting to go round the fireplace on this floor. The original lintel has been replaced by relatively modern wood and steel. Above this the breast is faced in stretcher bond across its full width; towards the base the broken ends of bricks provide further evidence that the floor level has been lowered, the base of the fire itself being some 0.50m above the current floor level.

The former stair hall, which occupied the central area, has reset panelling on the south wall, perhaps from the east wall of the back room. This is supported by the observation that in the front room the dentilation on the cornice is towards the top, whereas in the stair hall and the back room it is at the bottom.

The back room has full-height panelling on the north and south walls (Figure 138.1). At the back of the rear room in the south wall is an access door to the service staircase, which now only rises five steps to a lavatory (Figure 138.2). Immediately south of this an inserted gas fire indicates the location of the rear room fireplace.

First Floor (Figures 133, 140, 141)

Originally the first floor would have been accessed via the central staircase from the ground floor. Since this has been removed access is via a later stair rising directly from the street door at the north end of the front. The first floor retains its original plan with a room either side of the central stairwell. The rear room is extended 3.12m to the west into the 20^{th} century extension. In the front room both window reveals have 18^{th} century shutters with fielded panelling but the six-over-one sash frames are 19^{th} century or later (Figure 140.3). There is a moulded plaster cornice with a band of acanthus ornament, again probably 19^{th} century (Figure 140.4-5). The chimneybreast is on the south wall, no evidence of the fireplace was visible. To the east of the chimney the alcove has been used as a cupboard. The skirting is 8'' high with a moulded top.

During the building engineer's examination of the structure sections of wall covering were removed on the first, second and third floors. On the first floor this was in the northwest corner of the front room (Figure 140.6). This revealed that the north wall was of timber frame

construction and, at this point, had no outer skin, being open through to the wall of **No. 22** (see above). The frame was recorded in detail at this location and several carpenter's marks were observed (Figure 140.7-8). The construction uses basic mortice and tenon joints secured with pegs.

The back room has, on the north, south and part of the east walls, an 18th century dado rail above plain panelling (Figure 141.1-4). Later observation from outside showed that the panelling was fixed directly to the wooden frame with no plaster covering between (Figure 141.5). On the south wall the panelling is fitted integrally with a wooden fire surround; the fireplace is blocked. Further lengths of panelling were reset in the 20th century extension on the north, south and west walls. Immediately west of the chimney is the door to the service stair (Figure 141.6).

Second Floor (Figures 133, 142)

On the second floor the reveals of the front-room windows also have panelled shutters but the mouldings here are probably 19th century (Figure 142.1-2) as are the six-over-six sashes. A modern brick fireplace and gas fire are set centrally into the chimneybreast on the south wall; full height cupboards with four-panel doors have been set either side of this creating a flat wall plane. There is no cornice, but there is a picture rail round the whole room although this is almost certainly not original. The skirting is 6" with a moulded top. The architrave of the door to the stair landing is moulded with a 20th century replacement fire door. Detailed recording was made of the timber frame in the northwest corner of this room (see above).

In the back room there is 18th century fielded panelling surrounding the door to the service stair (Figure 142.7). A small cut away area on the west side of the panelling suggests the doorframe is inserted. Whether it replaces an earlier contemporary one or indicates that the access to the service stair post-dates the panelling is not clear. The service stair between this and the third floor is the most complete section to survive.

Third Floor (Figures 133 & 143)

Again at third floor level are two rooms set either side of the central staircase. The front room has two three-over-six sash windows to the street, as on the lower floors these are probably 19th century in date (Figure 143.1). In the south wall two arched alcoves are either side of the chimneybreast, which has a bolection moulded 20th century fire surround set centrally (Figure 143.2). The west wall has a door at the north end leading out on to the landing (Figure 143.3). Both the architrave and four-panel door are probably 20th century. The north wall is plain. There is no cornice and the skirting is narrow (3") and plain.

The back room is set partly into the roof space of the rear range. It has a modern two-pane sash set in a shallow dormer to the west; the north wall is plain. In the east wall is the access door from the stair landing, the frame is 18th century, the door itself a modern replacement. In the south wall, set centrally, is the chimneybreast. A modern gas fire obscures any trace of an original fireplace. To the east of the chimney the space has been extended westwards by 0.67m to create a small bathroom fitted with a roll-top bath only 1.40m (55½") long (Figure 143.6). To the west the line of the front of the chimneybreast is extended southwards. In this wall is inserted an 18th century door and frame giving access onto the top of the service stair (Figure 143.4 & .5).

Main Stairs

The main staircase would originally have extended from the basement to the third floor. As recorded the basement to first floor sections had been (long) removed and the stair began at first floor level. From first to second floor the stair has a short banister at the base only, with plain balusters and a turned newel. Above this point it is enclosed. It has a quarter turn with winders at the turn and is at the north side of the building. From second to third floor the

staircase is an early 20th century replacement with plain balusters and turned newels. The stair is an open-well with quarter-pace landings and is set to the south side of the building.

Detailed recording was made of the timber frame in the north wall of the stair hall on the third floor (see above).

Service Stair (106)

The service stair at the rear of **No. 23** originally extended from the basement to the third floor. Externally it is present to full height, but the stair itself is no longer complete. In the basement a few original steps survive, but there is no longer access to the ground floor, similarly between ground and first, and first and second. The most complete section is between the second and third floors where the stair rises to the full height allowing access between the two floors. The stair is plain, 18th century in date. Within the turret are several small closet rooms, which at the basement, ground, first and second floor levels have been converted to use as layatories.

Discussion

The plan of the older, 18th century, part of the building has front and back ranges which both extend over the full width of the property. Between them a central staircase ran from the basement to the third floor. A second, service, staircase occupied a turret which also had a series of small closet rooms at the southwest corner of the building. Although there have been some alterations 18th century features have survived on all floors, particularly the panelling on the ground and window features on the first. Originally the level of the ground floor was at the higher level still seen at the rear. This would suggest that access to the building was via steps at the front further enhancing the appearance of an already imposing structure. It is not clear whether these steps were central or to one side, either way it suggests that the 18th century doorway at the north end either post-dates the floor height reduction or has been moved.

Structures 85, 99, 104 (Figure 144)

These are three brick built ancillary structures to the rear of **No. 23**.

Of the three only **99** has any age to it, probably dating to the later 19th century. It is built in yellow/white brick laid in stretcher bond, with a pitched slate roof orientated north – south. There is evidence of an earlier door or window in the north end (Figure 144.2). As observed access to two WCs was through two doors in the west face (Figure 144.3), each with a small square casement window to the side. Structure **104** is a modern flat roofed extension to the east of **99**. Structure **85** is a small modern square brick shed with a flat roof a few metres west of **99**. All three are set against the wall of **94** to the south.

No. 24 St Andrew's Street

94, 97, 98 (Figures 145-154)

The building is of three storeys with a rear attic; no basement was located. Built in the early-mid 18th century it has a street range, which includes the staircase, and a back wing. All early features have been removed from the ground floor except for part of the 18th century staircase. The main stair has carved brackets to the tread ends and plain panelled walls. The front room on the first floor has full-height panelling and a marble fireplace surround. The back room has an 18th century moulded timber cornice. The attic has a mansard roof, which could suggest an early 19th century date, but the stair leading to it is enclosed by an 18th century timber wall. The building is listed Grade II. A brief description is given in the RCHM(E) volume for Cambridge (1959: 333 no. 168), which appears still current. Pevsner noted that No's 22-24 are 'a nice early 18th century group, especially pleasant No. 24 with keystone on the front' (2001: 246-7).

Exterior

Street Frontage (Figures 146 & 150)

The street elevation to **No. 24** is of dark red-brown 18th century brick laid in header bond with lighter rubbed red brick dressings to the windows and at the quoins. The surrounds consist of a single header alternating with a header and quarter bat. On the first floor, the windows have prominent key in the lighter red brick (Figure 150.3). The ground floor has a relatively modern shop front with a recessed door at the south end. At each end of the ground floor is a square pilaster with a moulded console above. The first floor windows are six-over-six sashes, the opening measuring 2.41m high. The second floor windows are also six-over-six sashes, but measuring only 1.64m high.

Four brick courses above the second floor windows is an ornate moulded and dentiled brick cornice projecting significantly from the wall face. The cornice does not extend across the entire face but is set between the two side areas of lighter red bricks. Every fifth dentil is shaped. Above this rises a parapet of seven courses topped with a flat coping. The parapet bricks generally match those of the main façade, but it appears to have been rebuilt the mortar being a dull grey rather than the white seen below.

Rear Elevation

The rear elevation is dominated by a timber framed four-storey rear wing with a mansard roof (Figure 150.3). This rises three storeys above the ground floor extension. It is plastered and painted white on the west side and weatherboard covered on the south side.

North and South Elevations

Other than for the south side of the rear wing the side elevations of **No. 24** are not visible.

Roofscape

Behind the parapet at the front is a flat roof with two small hipped roofs covered with slate rising from it. West of this the mansard wing rises the height of its attic (Figure 150.6). The mansard itself is covered with red ceramic tiles. Immediately south of the mansard at the front a small single slope roof is above the staircase to the attic.

Interior

Ground Floor (Figure 151)

The ground floor has been stripped out to form a shop area (Figure 151.1) and most of the early features removed, the exception being the 18th century staircase rising to the first floor. The stair is set between two corner fireplaces, one in the northwest corner of the street range room, the other in the northeast corner of the rear wing room. Both of these had been blocked and tiled over to fit modern heaters.

At the rear of the wing are two small ground floor only extensions. **97**, was probably a small yard at one time, but was built up and roofed over in the mid 20th century. Opening off the west side of this was **98**, a boiler and storeroom, with evidence of earlier use as an outside WC (Figure 151.5). The 'front' or west side to **97**, with its threshold and windowsills facing west, suggests that structure **98** was also an open yard, roofed over very recently. Subsequent clearance revealed that the wall of **98** was of 18th century construction with soft red brick on the west side and yellow/white brick on the south, both laid in English bond. The southwest corner had been strengthened in the 20th century by the addition of a buttress in fletton bricks (Figure 151.6). The north wall is a continuation of the north wall of **94** (see below) meaning that each wall of the structure as configured is of a different brick and presumably slightly different date.

First Floor (Figures 147 & 152)

The front room on the first floor has mid-18th century full-height panelling with a short panel below the dado and a long one above (152.1-2). Above the panelling is an ornate moulded cornice. The doorway has an original moulding with a modern replacement fire door. The two six-over-six sash windows have narrow panels set into the sides and top of the reveal. As on the ground floor the fireplaces are set into the corner backing onto the stair. In this room the fireplace, in the northwest corner, has a marble surround. Removal of some of the panels showed that the building was of timber frame construction with an apparently contemporary brick infill (Figure 152.3). In the limited exposures observed there was no trace of lath and plaster suggesting that the room had always been panelled with the panelling fixed directly to the frame. The removal of some floor boards showed a large beam running across the room (north to south) with joists fitted into it running east to west (Figure 152.4). Simple carpenter's marks were observed where joists and beam met.

The back room has an 18th century moulded timber cornice extending around the entire room (Figure 152.6). The walls are plain and later investigations showed that they were timber frame infilled with brick, finished with lath and plaster. B The fireplace is set in the northeast corner, the surround is 20th century tile (Figure 152.5). The single window is a six-over-six sash. Removal of floorboards again revealed a large beam running across the room east to west and joists fitted into it running north to south. Unlike the beam in the front room, which was squared up, this was less finished with a waney edge.

Second Floor (Figure 153)

The fittings in the rooms on the second floor were very simple by contrast to those on the floor below. The west wall of the room has near full height plain panelling with a cornice above (Figure 153.1), however the rest of the room is lath and plaster and lined with paper-covered hessian on a timber frame. The cornice extends around the other walls, except over the fireplace. When later work exposed the structure beneath the lath of the south wall it was seen to be timber frame infilled with brick. What was not clear, however, was whether this was an independent frame or actually part of **No. 25** next door (Figure 153.3). The window reveals are wood lined but plain. The fireplace, set in the northwest corner, has a narrow moulded mantle and is infilled with 20th century tiles (Figure 153.2).

The rear room is very plain with no cornice. The single window is a six-over-six sash. The fireplace, set in the northeast corner, has a 20th century frame around it and is tiled (Figure 153.4).

Third Floor

Only the rear wing has a third floor, being a small attic set within the mansard roof. This is accessed via a flight of stairs from the second floor landing (see below). The attic is narrow with the roof sloping inwards. There are no decorative features or a fireplace. The single windows at each end are wooden framed casements (Figure 153.5-6).

Staircase (Figures 148 & 154)

The main staircase is mid-18th century in date and rises from the ground to the second floor. It has carved brackets to the tread ends and plain panelled walls. The newels have square moulded tops and the rail is moulded. The balusters are turned with squared bases and tops and with a square block left within the turning. The stair is dogleg with a half pace landing. The main stair ends at the second floor landing from where a cupboard stair rises to the rear attic (Figure 154.6). This is enclosed by an 18th century timber wall and has a plain banister on the inside.

Discussion

In general the building appears to be consistently of an 18th century date with some later alterations. Based on the mansard roof it could be argued that at least the attic room of the rear wing is early 19th century, but the staircase to it is enclosed by an 18th century timber wall. The front room on the first floor has full-height panelling and a marble fireplace surround. The back room has an 18th-century moulded timber cornice. The fittings in the rooms on the second floor are by contrast very simple and the front room side walls appear to go back to the brick walls of the adjacent rooms and be lined with paper-covered hessian on a timber frame.

Sadly **No. 24** is one of the few that is not a College property and so the documentary record is sparse. Between 1833 and 1847 it was occupied by Charles Burbage butler at Emmanuel College and it is likely that the family had occupied the property for a considerable period prior to this. In the later 19th century occupants include James William Pryor, a solicitor and John Stevenson a baker & confectioner in 1851; Miss Susan Rickard, Milliner 1881-1884, Joseph & Charles B. Coulson, perfumers & Stationers in 1895, Coulson & Co., Theatrical Costumiers from 1913 and the Tansley Typewriter Company.

Structure 94

(Figures 155-159)

Structure **94** is a single storey brick building to the rear of **No. 24**, its eastern wall being shared with **98**.

Exterior

(Figures 155, 157, 158)

Only the north, west and upper part of the south walls of 94 were visible externally (Figure 157.1-2). The north wall was constructed in three butting sections. The east end of the north (exterior) face was not visible, but combined with observations on the south (internal) face it is clear that the wall was built as a boundary or garden wall in the 18th century with the middle and western stretches rebuilt or built rather later. The first 10.90m from the west end is of 18th century soft red brick laid in English bond (bricks measure 8½ x 4¼ x 2" (215 x 110 x 52mm) four courses rise 240mm). The middle section, up to 20.05m from the east end, is built in a harder pink brick laid in an irregular pattern of headers and stretchers. Part of the build is in Monk or Flying Flemish bond (see above) and part is in Flemish garden wall bond (a variant of Flemish bond, with three stretchers between each header, and the header centred over the stretcher in the middle of a group of three in the row below) but with runs of apparently random stretchers and headers breaking it up so that overall the pattern is not regular. The easternmost stretch (from 20.05m to the end) is a mid-red brick laid in Flemish bond. At the east end 35 courses are topped by a capping course laid on edge marking the top of the garden/yard wall. Immediately west of the eastern butt joint the wall top curves gracefully down to 25 courses plus the capping course and then continues at this height right through to the west end (Figure 158). (NB: course counts taken inside where the floor level is slightly lower than the external surface). Above the capping course the wall has been built up to its present height with mixed bricks, mostly headers with occasional stretchers. The two later sections of wall have double attached piers, four in the central section and two in the western section (presumably more before the wall was shortened). It seems that these were not used in the older section at the west, but as the whole length was not observed this cannot be stated categorically. Three openings have been made through the wall, all postdating its life as a garden wall. The current access door to **94** has been punched through the 18th century build, 4.60m west of this an inserted window has been blocked up as has a doorway a further 17m to the west. This doorway is closed up with concrete blocks into the cement of which someone has scrawled "walled up 1965" (Figure 157.3).

The west wall of **94** is modern, rebuilt c. 1971 when buildings to the west were removed for the reorientation of St. Tibb's row as part of the Lion Yard development, and **94** shortened by a few feet.

The western end of the south wall, largely obscured by **111**, is possibly the only part of the **94** structure that was constructed specifically for it (see below). Above the roof of **111** three blocked openings are visible, with arched heads of brick (Figure 157.4-5). Whilst these may have been blocked windows, they seem more likely to be the tops of blocked-in arched openings, only really visible during demolition. The purpose of these, other than presumably for access, is unknown.

The ridged roof of structure **94** is in two parts, the division being along the line of the east wall of structure **95**. To the west the roof was covered in corrugated mineral sheeting, to the east with corrugated tin or aluminium. Both sections have continuous glazing either side of the ridge extending about two-thirds of the way from the east end. There were two large pitched louvered wooden vents, one in each section of the main roof, within the glazed area. From above it is clear that the two sections of roof are of different widths, the narrower western section extending between the north walls of **94** and **95**, the wider mid section between the north wall of **94** and the north side of **96** (Figure 157.6), and the western section between the north wall of **94** and the length of purpose built wall to the west of **96**. In effect **94** only had an independent south wall at its west end.

Interior

(Figure 159)

Internally **94** was a long narrow structure with a braced common pitched roof (Figure 159.1-2). It is clear however, as indicated above, that it was not originally constructed as a roofed structure. The north wall has already been described above, the east wall (the same as the west wall of **98**), was built of soft red 18th century brick laid in English bond. Although both

walls are of a broadly similar date the shorter north - south one is not bonded into the longer east – west one and the level of the brick courses do not match indicating that the shorter wall was built after the longer one. The east wall does not extend across the full width of the roofed space. Internally the impression from outside, that the structure largely does not have its own south wall, is confirmed. The south side of the roof is supported on the two brick piers and a short (5.10m) length of wall forming the north side of **96**, the ground floor north wall of **95** and possibly the only purpose built part of **94**, the western end of the south wall (Figure 159.3). The elements related to **95** and **96** will be described as part of the relevant structures below. The roof division noted externally is reflected inside in that the eastern fourteen metres of the building is slightly wider (1.21m) than the western section. A picture from 1924 of Barrett's china store indicates that, for at least part of its life, the wider 'front' part was divided by a partition wall from the narrower 'rear' (Figure 179). The blocked window and door in the north wall belong to the conversion to a roofed structure, presumably later 19th century, the easternmost doorway is a late 20th century insertion and is not visible on the 1924 photograph.

The internal structure of the roof of **94** is consistent along the entire length, showing that although there are differences between the east and western parts externally, it is of one build. The roof is supported by a series of trusses, which consist of wooden principal rafters and braces tensioned with metal rods across the width of the building and to the principal rafters at the apex (Figure 159.5-6). Where the span is slightly wider, at the east end, the construction is the same with adjustments in the length of the wooden components and angle of the metal ones on the south side.

Discussion

Structure **94** appears to be a pragmatic solution to a need for covered space to the rear of **No. 24**. The expedience of placing a cleverly designed roof between several existing walls, partly garden/yard boundaries and partly the walls of adjacent structures, has created a building the full width of the available plot. At least part of the structure utilises boundary walls of the 18th century previously delineating the space to the rear of **No. 24**.

Before being taken over by Robert Sayle in the 1980s this was part of the shop and glass and china warehouse of Barrett and Son, formerly the Cambridge Glass and China Stores. Barrett's, founded in the 1780s, also had a shop at the comer of St Mary's Passage and the market. The china warehouse was in St Andrews Street by 1884 and it appears that for a time both shops were running simultaneously. Before that it was probably the furniture and piano warehouse run by the Flack family. The conversion from yard to building was probably carried out by either the Barrett's or the Flacks. The 1924 photograph of the interior of Barrett's shows that the rear of No. 25 (96, see below) and the rear of No. 24 (the front part of 94) were open together to form shop floor. The photographer, unfortunately, did not turn round to show us the view towards the street, but given the entries in the directories of the early 20th century it would seem that the shop at the front of No. 24 operated separately from No. 25 and the space behind both frontage buildings.

No. 25 St Andrew's Street

95, **96**, 111, 112 (Figures 160-168)

The Grade II listed building is of three storeys and a basement. The underlying structure is 18th century and it originally had a street range and a back wing, which were separated by a staircase. Most of the interior was refitted when the building was remodelled and extended early in the 19th century and in the 20th century the ground floor was opened up as shop space with a deeply recessed entrance flanked by display windows. Some 18th century fittings survive including the upper part of the staircase, a moulded plaster cornices in the first floor rear room and another plaster cornice at the head of the stair on the second floor. The building was not described by the RCHM(E) in the 1959 Cambridge volume.

Exterior

Street Frontage (Figures 161 & 165)

The front of the building is faced in late 18th century deep red brick. Mostly this is in English bond, but between the first and second floor windows is a band of slightly lighter red bricks, nine courses high, laid in Flemish bond. On the south edge of the face the quoin is picked out in yet a third red brick using a full brick alternating with a three-quarter brick.

The ground floor has a deeply recessed entrance flanked by display windows, the whole 20th century in date. The windows are 19th century with three one-over-one sashes on the first floor and three six-over-six sashes on the second. The windows on both these floors have segmented heads in brick. At the top of the face is a slightly projecting eaves cornice decorated with pairs of on-edge headers set at one full brick spacing.

South face (Figures 162 & 165)

During the first phase of recording the south face was obscured by the 1970s concrete buildings on the corner of St. Andrew's Street and Downing Street (Figure 165.6). Following their removal in May 2005 the undamaged upper west quarter of the south face was exposed (Figure 165.4). The face is covered in early 19th century grey bricks in English bond. A little over half way back from the front edge are two window openings, one above the other, on the first and second floors. These would have opened into the stairwell. The frames have been removed and both are blocked from the inside with wood, but the windows were intact when photographed by Peter Soar in 1971 (http://www.weepingash.co.uk). At the eastern quoin just enough is exposed to show that the red bricks of the front wrap round, and indeed extend rather further westwards along the top, but not enough to determine the relationship between them and the grey bricks or how far back the red bricks extend. There is an eaves-cornice at the top of the face matching that on the street frontage.

Rear Face (Figures 162 & 165)

The rear face has the same grey brick covering as the south, but laid more-or-less in Flemish bond. The ground floor has largely been removed by later extension to the west, so the earlier arrangement cannot be known. There are two windows on each of the first and second floors. All are double hung sashes, the northern one on the second floor is two-over-two, the rest are six-over-six. On both floors the windows have segmented brick heads. At the top of the face is an eaves-cornice matching that on the street frontage.

North Face

Most of the north face is obscured by the structure of **No. 24**, but a length of about 3.50m is visible at the west end where the rear wing of **No. 24** is narrower. Although the wall face is now flush, it is apparent that the earlier chimney stack, probably 18th century in date, has been built around later with the same phase of building as the rear and south faces (Figure 165.5). The edges of the stack are visible as vertical breaks in the brickwork, the courses not aligning either side. The eaves-cornice and the edge of the roof run continuously across the wall face and the outside of the stack demonstrating that it is the stack that is earlier. A small area of wall is exposed above the roof of **No. 24** at the front but is rendered so giving no detail.

Roof

The low-pitched roof is covered in slate and hipped to front and back. There are three stacks: one set roughly centrally with four pots across the building axis; one single pot towards the front on the north side; and one towards the rear, also on the north side, with four pots aligned with the axis of the building.

Interior

Basement (Figure 166.1-3)

The cellar has two rooms, the smaller to the front. It appears that at least parts of the north wall of the cellar are 18th century, the rest 19th century indicating an expansion at some stage. The floor above the cellar is entirely supported on RSJs. Access to the cellar in recent times was via a stair, which is located outside the earlier footprint of the building.

Ground Floor

The ground floor was opened up as a shop in the 20th century, with a deeply recessed entrance flanked by display windows, and it was probably then that the floor structure above the cellar was reconstructed and the cellar may have been enlarged (Figure 166.4). The rearrangement of the ground floor space meant that the staircase to the first floor was now accessed from outside (within the recessed entrance way) whereas originally this location would have been inside the front room. There was no access to the upper floors of **No. 25** from the ground floor after this change was made. In the rear a fireplace survived on the north wall but without any fittings (Figure 166.5).

Towards the front of the building were a couple of remainders of the longevity of business at this address. On the front to the right of the display window the inscription 'EST. 1782' is impressed into the tiles, themselves of 20th century origin. It is presumed that the date refers to Barrett's China store, which occupied this shop from the 1880s, but which was founded elsewhere in the 1780s (see below). Partially uncovered on the southern wall, inside the modern display windows, was a notice painted onto the wall reading "OOING RO", presumably "Shampooing Room", (Figure 166.6) a throwback to the building's long term partial use as a gentleman's hairdresser (see below).

First Floor (Figures 163 & 167)

For many years the entire first floor was used as a gentlemen's hairdresser and the visible décor reflected this, particularly in the front room (Figure 163.1-2).

The basic arrangement on the first floor was a street range and a rear wing separated by a staircase. Although much of the interior was remodelled and refitted in the 19th century, some 18th century fittings survive, principally a plain moulded plaster cornice in the rear room on this floor (Figure 167.4-5). Wall stubs to the west and east of the rear room and a beam in the ceiling mark the original extent of the rear wing prior to its southwards extension in the 19th

century, the cornice is limited to the same area. In the front room is an early 19th century moulded plaster cornice with acanthus ornament (Figure 167.3). The fireplace in the front room was presumably located centrally on the wall backing onto the stairwell, which would match with the large central stack observed externally. This fireplace was not observed and its form, if it survived, is not known. It is likely that this is an early 19th century alteration, the 18th century fireplace would be expected to have been on the north wall where there is a fireplace on the floor above. In the rear north room the fireplace has an early 19th century surround with a late 19th century grate (Figure 167.7).

In the stair area the staircase itself is of 18th century date with a gracefully tapering turned newel post, turned balusters and simply decorated cut string (Figure 163). On the landing between the front and rear rooms is 18th century panelling below the dado. In the present arrangement this central staircase begins at first floor level (Figure 167.4)

Second Floor (Figure 168)

The second floor has a similar layout to the first with a street range and rear wing that was subsequently extended southwards. To the rear a stud wall dividing the space into two rooms marks the line of the earlier wing, in the front the space has also been divided into roughly a third and two thirds. Within the rooms there are no surviving 18th century features and no cornice to front or rear. On the street wall in the front early 19th century fittings do survive around and below the windows (Figure 168.1). The fireplace has a late 19th century grate. In the rear (north) room a small early 19th century surround and grate is slightly offset in the stack suggesting it is a secondary addition (Figure 168.5-6). The 19th century arrangement of the second floor seems to be as two suites of offices either side of the stairwell.

The 18th century staircase continues to this level again with panelling below the dado (Figure 168.4). There is an 18th century plaster cornice around the top of the upper landing.

Discussion

Although altered in the 19th century, the 18th century form of **No. 25** is still discernible in the standing structure. Most of the surviving 18th century fabric, both structural and fittings, was limited to the rear wing and stairwell area suggesting that these were the least affected by the 19th century changes.

At present the earliest 19th century occupation evidence found for **No. 25** dates to the 1840s, the 1841 census showing that Samuel Bullock, a baker, was in occupation along with his family and servants. What the census does not record, however, is how much of the building was solely in domestic use and whether some parts were being used for non-residential businesses. Given the arrangement of the second floor it seems likely that they were although in the 1851 census a student lodger from the British East Indies is recorded indicating that the second floor suite may also have had residential use. Through the later 19th century the property is variously occupied or used by a surgeon, plumber, piano teacher, hairdresser and china and glass store. To the rear is a Turkish Baths but that is addressed below under no. **95**.

No. 25 was acquired by Robert Sayle in 1979 and subsequently used as their audio-visual department.

Structure 112

An 'L' shaped area between the rear of No. 25 and 94 and 96.

The north side of 112 is made by the southern walls of 97 and 98 to the rear of No. 24. The south wall fabric was not observed and there was no wall to the east or west. In effect this is a modern flat roof over an area between three structures (No. 25, 96 and 97/8). The stair to the basement beneath No. 25 is within 112.

Externally there is evidence on the rear wall of **No. 25** that the space had been filled at an earlier time with a structure with a pitched roof.

Structure 96

(Figures 169 - 172)

A narrow brick structure to the rear of **No. 25** with a slate single pitch roof.

Exterior

Prior to demolition only the south wall and roof of the structure were visible externally, the remainder having been either removed or obscured by other structures. The south wall was rendered with no details visible. Observation of the east edge, confirmed during demolition, showed it to be a single brick in thickness (4½"), relying for support on the much thicker wall (of a demolished structure) immediately abutting it to the south. A small portion of the west wall was observed during demolition. This was a 9" wall constructed from grey/white brick laid in Yorkshire bond. Integral to this build was a square chimney-stack on the southwest corner of the structure (Figure 172.3), in the same brick. The north wall survived for a little more than one-third of its length, but the outer face was cement rendered for all of this (Figure 172.1). Observation of the internal face shows it was a 9" wall constructed from grey/white bricks in Yorkshire bond.

The roof is a single pitch covered with slate and felt sloping down to form a valley with the corrugated metal roof of **94** to the north (Figure 172.2). The felt covers up roof lights set within the line of the roof and extending for its length.

Interior

Basement (Figure 171)

Although functionally the nearby basement (see below) belongs to the Bath House (96) it is physically located beneath the floor of the adjoining Structure 95 and is described there.

Ground Floor (Figure 172)

On first observation much of the structure was obscured by modern shop-fittings. As these were removed the original form of the structure, and alterations made to it, became visible.

The south wall, at least at the west end, had a series of blind arches, only one and a half of which were visible. This and the west wall were covered in Grecian pattern wallpaper (Figure 172.5). Although the paper cannot be precisely dated it does not appear to be present in a photograph of 1924, and probably belongs to the later part of the 20th century.

Between the corner of the south and west walls is the chimney stack observed externally. No openings were observed in relation to it at ground floor level. The west wall has two openings in it; at the south end a single width doorway, blocked; at the north end a double door, still in place though long disused. These are the doors visible in the 1924 photograph (Figure 172.4; 179).

The north wall survives for a little more than one-third of its length, the remainder having been removed and the roof supported on two brick pillars.

The east wall has been entirely removed.

Internally the roof has a tongue-and-groove ceiling, the roof-light windows were exposed following removal of the modern suspended ceiling (Figure 172.6).

Discussion

Although in its later life **96** was largely indistinguishable as being separate from the structures around it, it clearly stood largely independently when first constructed. The possible exception to this being the south side, which, at only one brick's thickness, may have relied on a structure to the south for part of its support. If however, as is possible, the full length of the south wall was built as a blind arcade, the thinner walling would have occurred between stronger columns and would not have needed to provide support; therefore the building could have stood entirely independently. Not enough of the wall's structure was seen to confirm this one way or the other. The west and north walls are sufficiently robust to support the structure, and the demolition observations show that **96** predates the construction of **95** as the outer face of the former (obscured by the latter) is dirty from exposure to the atmosphere. In addition the east wall of **95** is keyed into the west wall of **96** (see below).

The records for **No. 25** and the buildings to its rear show that several families and businesses occupied and used the plot in the second half of the 19th century together with parts of **No. 24** to the north. In 1841 the property was occupied by Samuel Bullock, a baker, his family and servants. From 1851-61 it was occupied by George Johnson, a surgeon and apothecary and his family and servants, though owned by 'the Misses Bones'. After Johnson the property passed to another surgeon, Thomas Lucas between 1866 and 1867. In the 1870's, however, the property passed into the hands of the Flack family whose occupations are variously recorded as plumber, painter, glazier, lodging house keeper, music and pianoforte warehouse keeper and teacher of music. One of the main roles of the property during this time was as a Turkish Baths; Walter Flack junior was the proprietor and in 1881 the property was described as a bathhouse and shop known as the University Bath Rooms. Subsequently the baths were run by a series of managers but went out of business by 1901.

By 1881 the property was owned by the Barrett family who ran the Cambridge Glass and China Stores. Initially the Cambridge Glass and China Stores was listed after the Turkish baths in directories (1884-91), but it later became the primary listing (1895 onwards) indicating that by then it had become the more significant business.

Having identified the presence of a bathhouse on the site prior to the commencement of fieldwork, it was uncertain which, if any, of the surviving structures that description might correctly be applied to. This has been resolved by the discovery in the Emmanuel College archives of a plan from 1882 that, although of the **No. 21** property, also shows the plots to the south in great detail. On this two buildings behind **Nos. 24** and **25** are labeled "Bath Rooms", the southern one of which is **96**. The date indicates that this is the layout of the site as taken over by Barrett & Sons in 1881. By the time of the 1885 1:500 OS map, only three years later, the layout has changed markedly. A small structure immediately west of **96** has gone to be replaced by **95** and the yard in which the second "Bath Rooms" building was located has been roofed over to form a single large structure (= **94**). Given the timings indicated by the directory entries it would suggest that **96** continues for a few years more as a bath house before being taken into the glass and china store as shown in the 1924 photograph.

Structure 95

(Figures 173-179)

95 is a two storey brick building immediately west of **96**, to the rear of **No. 25** St. Andrew's Street. Based on map evidence it was constructed between 1882 and 1885.

Exterior

(Figure 174 & 176)

The south wall is blind, the lower part rendered, the upper part built in white brick laid in an irregular bond, mostly stretchers with headers at every three to five bricks. On this side the wall height has been raised 10 courses higher than the roofline to form a parapet. This is part of the original build rather than a later added feature (Figure 176.1), confirmed by the recently discovered cross-section of the building in the Jesus archive (see below).

The west wall, only partly exposed prior to demolition, appears blind at first floor level, though is partially obscured by the structure around the later goods lift (Figure 176.2). There is a lintel set in the wall just above the roofline of **111**, which indicates an original doorway at ground floor level. This doorway was subsequently exposed during the stripping phase, but was not in use in the modern building. A later opening had been made in the wall on the north side of the goods lift. The wall is constructed in white brick laid in an unknown, but regular, bond consisting of three stretchers – header – two stretchers – header which aligns the headers above each other on every other course at $1\frac{1}{2}$ brick intervals.

The north wall was only visible externally at first floor level (above the roof of **94**), at ground level it was much altered, with six openings (four large, two small). Of these the smaller one at the east end may be an original feature, the rest being later, put through to connect with **94** (see also below). The original appearance is unknown (Figure 176.3). At first floor level are four iron-framed windows with arched brick heads. The wall is constructed in white brick laid in the same bond as the west wall. Externally the building is $5.02 \text{ m} (16' 6\frac{1}{2}'')$ wide at ground floor level, but narrows to $4.15 \text{ m} (13' 7\frac{1}{2}'')$ on the first floor. The difference is accounted for on the north side where the first floor front wall is stepped back by $0.83 \text{ m} (13' 7\frac{1}{2}'')$. The resulting step is mostly taken up with a long skylight providing light to the ground floor.

The east wall is largely obscured by **96** (Figure 176.5). Above that level it is blind, built in white brick with the same bond as the west and north walls. As with the west wall it is clear that the step out to the north of the ground floor is an original feature of the building.

The roof is hipped at both ends and covered with slate (Figure 176.6), with four flush skylights on the south side.

Interior

Basement (Figure 171)

During demolition and subsequent excavation beneath **95** a series of feature were revealed directly associated with operation of the bathhouse building immediately to the east (**96**). 2.4m metres west of the double doors was a substantial basement boiler room extending the full width of the building and 1.76m (5' 9") east – west. Within this was the scar of a large boiler and leading out from it extensive pipework. Running east beneath the floor were a series of ducts and the bases of flues, which would have opened into the walls. There is evidence of a contemporary structure to the north, also fed by pipework, which may represent a hot room or changing room for the baths, or part of the second bathhouse building indicated on the 1882 plan. No trace of this structure survived above ground.

Ground Floor (Figure 177)

Internally the ground floor plan is 15m long x 4.80m wide at the east end, 4.50m wide at the west end – the building being slightly tapered to the west. The ground floor appears to occupy the whole width of the plot behind **No. 25**. There are two openings in the east wall to **96**, a tall double width door and a blocked single door (Figure 177.4-5). Interestingly the single width door way is blocked by the wooden stair to the first floor, and may rightfully belong to structure **96** to the east. Alternatively the staircase is in a secondary position, although no direct evidence was observed to indicate where an earlier stair might have been located. The double door could belong to either structure, but the header arch and shape of the opening is identical to a second one within **95** (Figure 177.1, .6), so it seems more likely that this opening belongs to **95**. At the west end are two openings, that on the north side is later, that on the south appears contemporary with the building, but was not in use in the modern arrangement (Figure 177.2). There is a north-south cross wall 4.25m from the east end. An arch-headed opening, in line with and matching the double doorway to **96**, is placed slightly to the north of centre of this wall. A second, later, opening has been punched through giving access to the below stairs area (Figure 177.3).

In the north wall, just above the height of the later large openings (see above, exterior) are four shallow arches, similar in style to the door heads described above, set flush with the internal face. The positions of these coincide with the window openings on the first floor. Despite careful examination, however, these arches were not visible on the outer face of the north wall. These seem not to be blocked openings but relieving arches either to support the skylight roof above or, more probably, providing strength above lintels (no longer extant) to original openings on the ground floor. It seems likely therefore that although the large openings observed in the north wall are later, they replaced and enlarged earlier openings in broadly similar positions.

First Floor (Figure 178)

The narrower first floor is 4.15m wide at the east end, 3.83m at the west end. It is accessed from the ground floor by a wooden staircase at the east end (Figure 178.1). The space is divided into two rooms on the same wall line as the floor below (Figure 178.2-5). There are four arch-headed iron-framed windows in the north wall, three in the large room, one in the small. The ceiling is boarded with four light-wells allowing in daylight from the skylights set in the roof.

Discussion

The sequence of buildings around **94**, **95** and **96** is more complex than the last buildings standing there would tend to suggest. The boiler room for the bathhouse was located outside the main building, but the plan of 1882 shows that there was a small structure to the west of **95**, and presumably the boiler room was accommodated within that. This, however, is not the present **95**, although it is possible that some elements were preserved in the later build. As mentioned above the layout changed between 1882, the date of the plan of **No. 21**, and 1885/6 when the Ordnance Survey 1:500 map was published. This almost certainly dates the construction of **95** to between those dates. That the building was constructed by Messes Barrett & Sons as part of their expansion onto the St. Andrew's Street site is confirmed by the recent discovery of a building cross-section in the Jesus College archive, undated, but presumably from the mid-1880s, showing the distinctive shape of the **95** structure. Unfortunately there is no depiction of plan, elevation or stair position on this single drawing.

The archaeological findings demonstrate unequivocally that the basement boiler room is integral to the functioning of the bathhouse, equally clearly 95 is not the structure it was built within. One question that is difficult to answer is whether 95 incorporated any elements of the earlier boiler house structure. The coherence of the build would argue against, but the location of the doors and the division of 95 into two distinct areas or rooms, the boiler room basement being entirely within the easternmost, suggests it is possible that when 95 was built (around 1883/4 when documentary records indicate that the bathhouse was still functioning) its eastern end replaced the earlier structure in housing the boiler room. At this stage, although no evidence was seen for an earlier position, the staircase must have been located elsewhere. Once the bathhouse went out of use the stair was moved to its later location. blocking the single door through from 96, but creating 'better' space on the first floor. If this is not a secondary location for the staircase it is odd that the single door would have been created between the two structures and then immediately blocked, but only with wood.

Structure 111

(Figure 176.2)

A 20th century lean-to of wood and corrugated metal, constructed after the 1970s realignment of St. Tibb's Row.

General Discussion

(Figures 180 & 181)

In contrast with the demolition ahead of construction of the Lion Yard in the 1970s, the Grand Arcade project has paid due service to the above ground record of the past as well as that below ground (also largely neglected in the earlier redevelopment). Very little remains by way of record of the hundreds of buildings removed in the 1970s save an album of photographs by Mike Petty in the Cambridge Collection, and a recently rediscovered collection of photographs by local solicitor Peter Soar, now available (http://www.weepingash.co.uk). Of the nine historic building entries in the Royal Commission Volume (RCHM(E) 1959) only one, Fisher House, still stands, the losses including buildings with surviving 16th and 17th century features.

The present study was conceived in the first instance as an attempt to record the structures to be affected by the Grand Arcade as they stood in November 2004, regardless of date or perceived significance. Such a record is, however, of only limited interest without understanding based in a theoretical based interpretation. This volume, in essence a technical report, can only begin to touch on such an interpretation, but themes begin to emerge. The role of the retail institution, Robert Sayle, has already been looked at (see above), but only in the most rudimentary fashion. The smaller shops, the mix of business and domestic, being in Cambridge the interaction between town and gown, would all form parts of such a study. One point made by the building conservation officer for Cambridge was that the recording, particularly the photographs, should also attempt to capture the essence of the buildings. a feeling for what it might be like to live, work or shop in them. Again this more technical record only touches on that aspect, but some of the images selected and others in the archive go some way towards it although these are, by definition, pictures of shops and offices with no goods and no people present.

In the broadest terms all the frontage structures have their roots in the medieval origins of the suburb outside the town ditch. Based on the subsequent archaeological investigations (Cessford 2007, Cessford and Dickens forthcoming) the earliest occupation dates to the first part of the 11th century, with the area becoming more organised and gradually more densely occupied from the late 11th/early 12th centuries onwards. Within the buildings as they stood in November 2004, however, no fabric earlier than the early 18th century was evident. Figure 186 summarises that survival and indicates the general dates of construction of the standing buildings. Parts of Nos. 20, 22, 23, 24 and 25 St Andrew's Street partially or substantially retain 18th century fabric with the most complete buildings on the site being Structures 42 and **65**, dating to the later 18th century. Lengths of 18th century boundary or garden wall were also recorded at 105 and 110 and others were incorporated into the later structures of **94** and **96**. By area this all represent about 7% of the standing structures with 33% being 19th century and 60% 20th century. Figure 186 also demonstrates the proportion of land built on as opposed to open. In some plots, noticeably behind Nos. 22 and 23 the yard area is actually less covered-over than it was in the aerial photograph of 1968 (Figure

2) whereas behind **Nos. 12-20** the only areas open to the sky are a short length of the former alleyway between **Nos. 15** and **16**, and the service yard on St. Tibb's Row. Both are reflections of the changes brought about by the realignment of St. Tibb's Row in the early 1970s.

More detailed examination of both the specific and broader contexts of these results will form part of the forthcoming publication of the project (Cessford and Dickens forthcoming) serving also to tie in the surviving structures with any archaeological evidence for their forerunners. The whole of the project together truly looking to examine the story of the site "from the rooftops down".

References

Addis, W. 1997 'Concrete and steel in twentieth century construction: from experimentation to mainstream usage' in Stratton, M. (ed) *Structure and style:* Conserving 20th Century Buildings Taylor & Francis Ltd. p103-142

Baggs, A. and A. Dickens 2005 22-25 St Andrew's Street, Historic Building Survey: The Listed Buildings CAU Report 698

Cessford, C. 2007 *Grand Arcade, Cambridge: An Archaeological Excavation. Vol* 1 & 2 CAU Report **800**

Cessford C. and A. Dickens forthcoming *The King's Ditch and Beyond:* intimate archaeologies of the Medieval, Post-Medieval and Modern Occupation of a Cambridge Suburb and the Town Ditch

Laermans, R., 'Learning to consume: Early department stores and the shaping of the modern consumer culture' *Theory, Culture and Society*, Vol. 10, No. 4, pp. 79-102, 1993

Lintonbon, J. 2006 "Designer Shopping": The development of the department store in nineteenth century Sheffield Materializing Sheffield: Place, Culture, Identity Website -

http://www.hrionline.ac.uk/matshef/lintonbon/MSlintonbon.htm

Pevsner, N. 2001 Cambridgeshire (The Buildings of England) Penguin

RCHM(E) 1959 An Inventory of the Historical Monuments in the City of Cambridge (2 Volumes) HMSO

Sieveking & Gooch 2004 A History of Robert Sayle John Lewis Partnership

Wilcox, R. A and E. M. Whitham 2003 'The Symbol of Modern Medicine: Why One Snake Is More Than Two' *Annals of Internal Medicine* Volume **138** Issue 8: 673-677